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ABSTRACT

This advisory list describes instructional media appropriate to school science programs for primary through senior high school grade levels. Entries included on the list were selected from those materials submitted by publishers which received favorable reviews by educators. Materials are arranged by type of media: books, films, filmstrips, kits, slide sets, and study prints. An unannotated list of books favorably reviewed in the indicated sources is attached. Entries include citation, price if available, grade level, and annotation. (Author/KP)

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ADVISORY LIST OF INSTRUCTIONAL MEDIA

FOR

SCIENCE

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State Department of Public Instruction
Division of educational media
Raleigh, North Carolina
Jan. & Sept. 1977

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Materials Review & Evaluation Services
Division of Educational Media
State Department of Public Instruction

Raleigh, North Carolina
January 1977

ADVISORY LIST OF INSTRUCTIONAL MEDIA

FOR

SCIENCE

This bibliography includes instructional media appropriate to the Science program in the schools. The items are listed by type of media. The order of the listing is as follows:

activity cards	filmstrips (silent)	programmed materials
art prints	filmstrips (sound)	puzzles
books	games	realia
books (for teacher use)	globes	recordings (cassette tapes)
books (reference)	kits	recordings (disc)
books (supplementary texts)	manipulative devices	recordings (reel-to-reel tapes)
books with recordings	maps	reprints
calendars	measuring tapes	shortstrips
charts	microforms	slide sets (2"x2")
dictionaries	mini-units	slide sets (sound)
duplicating masters	models	study prints
film loops (silent)	periodicals	transparencies
film loops (sound)	pictures	videotapes
films (16mm)	posters	workbooks with recordings

The absence from this list of a given type of media indicates that no media of that type were reviewed or that none were deemed worthy of being called to the attention of schools. The name of a school administrative unit appearing after an annotation indicates that educators in that school system reviewed the item annotated and submitted the information for inclusion on the ADVISORY LISTS. Occasionally, such items may not appear on display at the Materials Review and Evaluation Center in Raleigh. Educators should bear in mind that materials included on this list were selected from those which publishers chose to submit for evaluation and may assume that materials available for purchase not appearing on the list either were not submitted for evaluation or received unfavorable reviews. Information about negative reviews, which do not appear on this bibliography, can be obtained by writing or calling the Materials Review and Evaluation Center. At the end of this bibliography may be found an unannotated list of books which have had favorable reviews in reliable reviewing sources.

The levels at which the media may be most effectively used are indicated by "prim" (primary: Grades K-3), "elem" (elementary: Grades 4-6), "jhs" (junior high school: Grades 7-8[9]), and "shs" (senior high school: Grades [9]10-12). The insertion of an arabic numeral after the grade level indicates that the item is especially pertinent at that specific grade level--e.g., "elem-6."

In some cases prices were not available. Prices shown are those quoted by publishers and producers. Prices quoted do not include postage and are subject to change.

All items included on this bibliography except 16mm films and some items suggested for inclusion by local school administrative units are displayed in the Materials Review and Evaluation Center at 620 North West Street in Raleigh.

PLEASE DO NOT ORDER BOOKS ON THIS LIST FROM THE MATERIALS REVIEW AND EVALUATION CENTER OR FROM THE DIVISION OF TEXTBOOKS. Sources of the books are listed on the colored sheets at the end of this bibliography and in the DIRECTORY OF PUBLISHERS AND PRODUCERS PARTICIPATING IN THE MEDIA REVIEW PROGRAM, a separate publication accompanying the complete set of ADVISORY LISTS OF INSTRUCTIONAL MEDIA. An abbreviated or code name for the publisher/producer appearing in the bibliographic entry on this list appears in the DIRECTORY, where the complete address follows the code name.

Schools may use this list to aid in selection of materials but are in no way restricted to purchasing items included on this list.

BOOKS

Adkins, Jan. INSIDE: SEEING BENEATH THE SURFACE. Walker & Co., 1975. 32 p. $6.85. elem jhs

Eloquent plea to see beyond the surface to reality, to view ordinary things with extraordinary perception using the inner eye of imagination and vision; detailed cross sections of everyday items illustrate point--pencils, sandwiches, tree, airliner, ocean liner, street, harbor, valley, apple pie as seen by engineer and a baker--done in shades of gray, carefully labeled; clearly written text with touches of wit, poetry, and philosophical insight

Anderson, Norman D. INVESTIGATING SCIENCE USING YOUR WHOLE BODY. McGraw, 1975. 96 p. $5.72. elem jhs

Unique presentation of science by North Carolina State University Science Education professor in which students use their bodies to learn about matter and energy, earth science, life science; employing their five senses, muscles, temperature, awareness of pain, pressure, equilibrium, readers explore density concept and principle of leverage, measure lung capacity, find their own horsepower; suggested activities include drawing a map of basketball court dimensions and making a planetarium; excellent in-depth study with clarifying diagrams; indexed; for individual or small-group assignment

Annixter, Jane and Paul. MONKEYS AND APES. Watts, 1976. 65 p. $3.90. elem jhs

Introduction to primates with descriptive materials on prosimians, monkeys, and apes; contrasts Old World and New World monkeys; compares evolution of monkeys and man; describes many species of primates and recounts experiments with monkeys and chimpanzees to measure their intelligence and language ability; emphasizes their importance in scientific advances, such as development of Salk vaccine, establishment of RH blood types, space travel; accurate, straightforward presentation in most instances; large, dark print and high-quality black-and-white photographs; indexed

Arehart-Treichel, Joan. IMMUNITY: HOW OUR BODIES RESIST DISEASE. Holiday, 1976. 160 p. $6.95. jhs shs

Examines what immunologists now know about how the human body protects itself, and changes in the immune system from moment of conception in womb through adolescence, adulthood, and death; includes how vaccines got started and current knowledge about organisms that cause various infectious diseases, such

IMMUNITY: HOW OUR BODIES RESIST DISEASE. (Cont'd)

as tuberculosis, pneumonia, tetanus; further information concerns immunology and cancer, allergies, asthma, and autoimmune diseases; informative resource book, well illustrated with photographs, drawings, diagrams; glossary and index

Asimov, Isaac. ASIMOV ON ASTRONOMY. Anchor, 1974. 271 p. $3.50 paper. jhs shs

Collection of 17 previous articles by Isaac Asimov, readable, enjoyable, informative; topics include double stars, gravity, solar system, galaxies, and tides; captioned black-and-white photographs with mini-lesson explanations; complete index; valuable addition to astronomy collections

Asimov, Isaac. THE ENDS OF THE EARTH: THE POLAR REGIONS OF THE WORLD. Weybright, 1975. 363 p. $15.95 jhs shs

Comprehensive discussion of Arctic and Antarctic, covering exploration of polar regions, behavior of ice, weather and climates, and astronomical phenomena of North and South Poles; author's enthusiasm enlivens material, making subject fascinating, informative; each topic clearly explained; 60 line drawings and diagrams, plus index

Asimov, Isaac. HOW DID WE FIND OUT ABOUT ATOMS? Walker & Co., 1976. 62 p. $5.85. elem jhs

Traces development of atomic theory from ancient Greek philosophers who disagreed among themselves concerning notion of atoms through specific contributions by scientists dating from Boyle's Law in 1622, including such notables as Dalton, Berzelius, Kekulé, and Einstein, to Mueller's invention of field-emission microscope in 1936; well organized, clearly explained, enriched by line drawings, diagrams, pen-and-ink portraits of key scientists; index and phonetic pronunciations of proper names

Asimov, Isaac. HOW DID WE FIND OUT ABOUT ENERGY? Walker & Co., 1975. 64 p. $5.85. elem

History of developments leading to man's present understanding of energy; describes first studies of motion by Galileo, experiments in heat-energy relationships, Julius Mayer's thesis of conservation, and experiments of James Joule and Hermann Helmholtz demonstrating that thesis; explains principle of entropy, touches on nuclear energy, and theorizes that scientists' discoveries of new energy sources will alleviate present shortage; nontechnical language, interesting, informative; pen-and-ink portraits of key scientists, diagrams of scientific principles, index; covers scientists from Galileo to Fermi; various forms of energy and laws related to energy explained in simplified way; in-depth summary

Asimov, Isaac. JUPITER, THE LARGEST PLANET. Lothrop, 1976. 324 p. $5.81. jhs shs

Revised edition of 1973 publication updated to include results of Pioneer space explorations; discusses planets in general and Jupiter in particular--size, shape, atmosphere, satellites, influence it exerts on other planets, including earth; very readable treatment of complex ideas; 54 tables of statistical information, charcoal portraits of key figures, glossary, index

Asimov, Isaac. THE ENDS OF THE UNIVERSE. Rev. ed. Walker & Co., 1976. 141 p. $6.39. jhs shs

Comprehensive survey of universe and its features from clouds and nebulae to galaxies, X-ray sources, and quasars; clear, simple explanations make exceptional reading; few writers have Asimov's ability to convert the complicated to exciting and stimulating narrative; excellent book for interested beginner; the only changes in this revised edition of the 1967 publication are Chapter 10, "X-ray Stars and Radio Sources," and additions to suggested reading list

Aylesworth, Thomas G. THE SEARCH FOR LIFE. Rand, 1975. 124 p. $5.79. jhs shs

Brief history of achievements in scientists' continuous efforts to discover the essence of life, beginning with elixer experiments by alchemists of ancient times, moving to examination of evolution of artificial parts, into transplants and freezing techniques; discusses artificial insemination professionally, clearly; considers future possibilities in genetic engineering, such as cloning; skillfully presented; excellent in-depth view of modern accomplishments in medical biology; photographs, drawings, bibliography, index

Balestrino, Philip. FAT AND SKINNY. Crowell, 1975. 33 p. $5.25. prim elem-4

Adequate though cursory introduction to metabolism and obesity which explains in simple terms what calories are, how metabolism turns food into energy, and why some foods affect some people one way and others another way; brief calorie chart with number of calories in a specific food and kinds of activities per hour to burn up those calories; double-spread drawings, most in color. (This item also appears on the Health, Safety, and Physical Education Advisory List.)

Bartlett, Margaret Farrington. WHO WILL ANSWER THE OWL? Coward, 1976. 96 p. $5.96. jhs

Describes methods of communication used by many species of animals, such as waggle dance of honeybee, owl's hoot, prairie dog's bark, snake's rattle; special chapter on primate signals and sophisticated language of dolphins; suggests greater sensitivity to animals as stepping-stone to better understanding among human beings; pen-and-ink illustrations; for second-purchase consideration after basic collection is complete

Baxter, John, and Thomas Atkins. THE FIRE CAME BY: THE RIDDLE OF THE GREAT SIBERIAN EXPLOSION. Doubleday, 1976. 165 p. $7.95. jhs shs

Historical, scientific review of destructive fireball explosion in remote Siberian forest in 1908; reviews studies and expeditions conducted to determine its cause, rejects Leonid A. Kulik's meteorite theory, suggesting instead a cosmic visitor whose extraterrestrial vehicle exploded upon impact with earth's atmosphere; intriguing, fascinating; for science libraries; foreword by Isaac Asimov; bibliography, photographs

Bedeschi, Giulio. SCIENCE OF MEDICINE. Watts, 1975. 127 p. $6.90. jhs shs-10

History of medicine, conquest of infectious disease in the last century, surgical advances, diseases that defy conquest today, problems and innovations in health care delivery, and space medicine; international in scope; medical terms defined within very readable text; beautifully, copiously illustrated

SCIENCE OF MEDICINE. (Cont'd)

(color photographs, diagrams, drawings), although several illustrations (Mendel's Laws) are not explained in text, and a photograph of Jonas Salk is labelled "James" Salk; fascinating for casual reading and valuable for research

Berenstain, Stan and Jan. THE BEARS' NATURE GUIDE: ALMOST EVERYTHING SMALL BEARS AND KIDS NEED TO KNOW ABOUT THE ANIMALS, THE PLANTS, THE EARTH ITSELF. Random, 1975. 64 p. $4.99. prim

Papa Bear takes his family on a nature walk, describing plants, animals, earth in informative, lively, rhyming word pictures illustrated in delightful cartoon drawings with numerous charming details; they are literally "caught up" in a spider's web and graphically discover skunks; Papa extols beauty and usefulness of plants and fascinates his children with whys and wherefores of mountains, oceans, rivers, ice, plains, deserts, caves--excellent individual or small-group introduction or summary

Berger, Melvin. CONSUMER PROTECTION LABS. John Day, 1975. 127 p. $6.95. elem jhs shs

Easy to read, large-print text with black-and-white photographs which gives an overview of consumer information laboratories and scientists who work there; covers food, drug, and processing labs, agricultural labs, auto safety labs, merchandise-testing labs, and consumer information labs; interesting reference for individual study or teacher's presentation in career exploration units; not a first-priority purchase. (This item also appears on the Guidance Advisory List.)

Blassingame, Wyatt. THE LITTLE KILLERS: FLEAS, LICE, MOSQUITOES. Putnam, 1975. 128 p. $5.95. jhs shs

Recounts destructive powers of these disease-carrying insects, especially noting how epidemics of plague, typhus, malaria have decided wars and shaped history--Charles V crowned emperor because typhus destroyed French army; scientists' attempts to determine causes and cures of diseases make interesting, exciting reading; rich in human-interest flavor; useful introduction or summary; provides numerous statistics; indexed

Blumberg, Rhoda. SHARKS. Watts, 1976. 77 p. $3.90. elem jhs-7

Covers sharks' physical characteristics, physiology such as feeding habits and reproduction, and relationships to enemies as well as to their companions, the pilot fish and suckerfish; several shark types--the biggest, most familiar, oddest, and those with unusual habitats--discussed in more detail; black-and-white photographs but labeling of specific parts of sharks would benefit readers; glossary and bibliography; for casual reading or for use as a source book

Blumberg, Stanley A., and Gwinn Owens. ENERGY AND CONFLICT: THE LIFE AND TIMES OF EDWARD TELLER. Putnam, 1976. 492 p. $12.95. shs

First full-length biography of physicist, Edward Teller, father of hydrogen bomb and principal figure in creation of Nuclear Age; fair, objective account of a complex man, whose sundered relationships and precarious health were the price exacted for his contribution; Teller's vital role in developing hydrogen

ENERGY AND CONFLICT: THE LIFE AND TIMES OF EDWARD TELLER. (Cont'd)

bomb and his conservative political views are examined in an "after-Watergate" context, which finds such activities dubious and destructive; on the other hand, the cooperation of both Teller and his family and supporters permit sympathetic view full play also; probing, stimulating account; excellent independent study resource for capable minds

Borgese, Elisabeth Mann. THE DRAMA OF THE OCEANS. Abrams, 1975. 258 p. $25.
jhs shs

When you combine superb writing with the unsurpassable work of the world's greatest photographers and apply both to the earth's oceans, the result can only be a book that staggers the senses; Elisabeth Borgese has produced a monumental tribute to the sea; throughout its 258 pages, this book pleases the eye and opens new worlds to the imagination; the work is divided into three major sections: the first sets the scene geophysically, biologically, and in terms of mankind's reliance on the sea; the second chronicles activities of those whose day-to-day living revolves around the oceans; final portion addresses the problem of man's polluting activity and its potential to destroy sea life; every oceanography collection needs books like this one--this volume can excite the casual browser, converting him into an avidly concerned student of the subject; a superb book!

Branley, Franklyn M. ENERGY FOR THE 21st CENTURY. Crowell, 1975. 85 p. $5.95.
elem jhs

A thorough background for understanding energy we may need and sources we may harness in future; vivid descriptions and examples of man's increased use of energy; fossil fuels (coal, oil, and gas) discussed, along with means for increasing their efficiency; suggests and discusses numerous energy sources of the future--solar panes, fuel cells, nuclear fission and fusion, geothermal, wind, and solar/sea power; pros and cons given for each; well illustrated with diagrams; cross-referenced index; excellent for in-depth study

Branley, Franklyn M. HOW LITTLE AND HOW MUCH: A BOOK ABOUT SCALES. Crowell, 1976. 32 p. $5.95. prim-3 elem-4

Succinct presentation of fundamental idea that measurement is a way of comparing and that there must be some unit against which the comparison is made; centers on concepts of length and temperature; moves from nonstandard to standard units of length; does not overpower reader with too many different units, though both customary and metric are included; elementary explanation of development of Fahrenheit thermometer; easy reading; well organized; illustrations appealing to children. (This item also appears on the Mathematics Advisory List.)

Brenner, Barbara. LIZARD TALES AND CACTUS SPINES. Harper, 1975. 84 p. $5.79.
elem jhs-7

Convincing little book about desert life, particularly the lizard, narrated by 12-year-old boy visiting his sister, a botanist working at Arizona research station; his main interest, lizards, leads Alan Pippin through many adventures as he learns about desert ecosystem and different animals' adaptations, allowing them to survive there; he discovers various lizards, including horned lizard, desert whiptail, Gila Monster, and Chuckwalla, along with rattlesnake and scorpion; black-and-white photographs are textbookish--dull, failing to

LIZARD TALES AND CACTUS SPINES. (Cont'd)

distinguish features sharply against backgrounds that often merge with their subjects; good index; lively, fast-paced text; solid information; good for in-depth study

Brewer, Mary. WHAT FLOATS? Childrens, 1976. unp. $4.95. prim

An elementary investigation into kinds of objects that float and kinds that sink in water; reasons for floatation explained; narrated in simple, first-person style by a fictional, towheaded little boy depicted in his swimming trunks at the seaside where he tests various objects in the water--beach ball, pebbles, a length of chain, etc.; illustrated with colored drawings; appropriate for science units in primary grades

Busch, Phyllis S. LIVING THINGS THAT POISON, ITCH, AND STING. Walker & Co., 1976. 128 p. $6.95. jhs shs

Collection of information on toxic plants and animals; contains descriptions of toxic plants and animals and the symptoms they cause in humans when ingested, injected, or contacted by the skin; plants and animals containing toxic agents treated separately; in some few instances antidotes for poison recommended; drawings help identify plants and animals discussed; appended are lists of harmful animals and harmful plants; indexed; appropriate for high school biology students

Buxton, Ralph. NATURE'S GLIDERS: THE FLYING SQUIRRELS. Childrens, 1975. 31 p. $4.95. prim elem

Interesting, detailed portrait of flying squirrel which discusses body structure enabling squirrel to glide, its food, its social behavior during cold weather, mating habits, parental care, and predators; attractive brown and green drawings provide close-up details of these seldom seen creatures, as well as excellent depictions of their nocturnal environment; ideal for introducing pupils to how habits, body structure, and function enable flying squirrels' survival

Cairns, Huntington. THIS OTHER EDEN: ASPECTS OF THE NATURAL HISTORY OF THE OUTER BANKS OF NORTH CAROLINA. Times Printing, 1974. 76 p. $2.95 paper. jhs-9 shs

A small paperback with a message best summed up in the author's own words--"The Outer Banks are more than an ecological paradise. They are a state of mind in which the poetry of nature may be seen in its most civilizing aspect"; Cairns' text roves over North Carolina's Outer Banks, commenting in philosophic, picturesque prose on the abundance of nature preserved there undisturbed; notes on unusual aspects of plant and animal life include analysis of the mathematically concentric perfection of shells and sunflowers, descriptions of prehistoric artifacts, speculation on the Banks' origin, little-known facts on such taken-for-granted creatures as the frog and the turtle, as well as countless other tidbits of information distilled by wise, uncynical observation; Cairns carefully refers readers to authors and titles for further study of each topic; quotations from Thoreau and Shakespeare are comfortably interwoven in the text, the author's familiarity with literature as well as flora and fauna contributing to his relaxed, engaging style; an excellent source for science study or, in English class, for the study of the informal essay

Calder, Nigel. THE WEATHER MACHINE: HOW OUR WEATHER WORKS AND WHY IT IS CHANGING. Viking, 1976. 143 p. $4.95 paper. jhs shs

Nigel Calder's first effort, RESTLESS EARTH, dealt with a revolution in geology; this publication deals with a revolution in meteorology; Calder begins with evidence preserved in glaciers, tree rings, and sediments pointing to major changes in world's weather patterns; second section focuses on current knowledge concerning how our atmosphere works and how it is studied; final section investigates possibility that a major climatic change is underway, delving into reasons and possible results; well written, clearly illustrated, although in some areas one wishes for more information; bibliography; complete index; students who have completed basic study of principles of meterology or whose hobby is forecasting will find this book interesting, valuable

Caras, Roger. SKUNK FOR A DAY. Windmill, 1976. unp. $5.95. prim-3 elem

The adventures of a skunk from nightfall to morning; describes gestation and birth of a litter of skunks and training received from mother skunk, feeding habits and means of protection, and skunks' relationships with other nocturnal animals; carefully executed pen-and-ink drawings by Diane Paterson add special dimension to text, capturing the night scene in haunting detail--the great horned owl swooping silently down, the farm dog in hot pursuit, the blinding headlights of a truck; text encourages readers to imagine themselves as skunks ("Today you are a skunk" and "Not all skunks will be as fortunate as you this night," etc., creating sense of immediacy and urgency); should fascinate young readers

Carr, Rachel. SAFARI TO NGORONGORO. Coward, 1976. 48 p. $6.95. elem jhs

Thumbnail sketch--really a short photographic essay--of different species of birds and mammals living in Ngorongoro Crater, Tanzania; brief descriptions of Maasai who live near crater; cursory glances at native wildlife; profusely illustrated with black-and-white photographs; consider as second purchase for middle grades/junior high school science collection

Chester, Michael. DEEPER THAN SPEECH: FRONTIERS OF LANGUAGE AND COMMUNICATION. Macmillan, 1975. 90 p. $5.95. elem jhs

Experiments with self-learning computers that can teach themselves, chimpanzees that use and understand complicated human sign language, and scientific investigations into strange world of ESP--all presented here; excellent for rattling closed minds and freeing imaginations to explore untold possibilities in areas of communication--with outer space, with other animals, with primitive peoples whose messages lie all around us, with dream interpretation; short, fast (though not necessarily easy) reading; illustrated; indexed; challenging addition to elementary or junior high school library. (This item also appears on the Social Studies Advisory List.)

Clarkson, Ewan. WOLF COUNTRY: A WILDERNESS PILGRIMAGE. Dutton, 1975. 147 p. $8.95. jhs shs

Sensitive, personal account of author's late summer sojourn in wilderness of northern Michigan and Minnesota to observe wolves in their natural surroundings; they elude him, but his total experience of the land expresses itself in eloquent descriptions of animals of the area--wolves, moose, deer, beavers; discusses effects of lumber industry, sale of beaver pelts, man's cruelty in destroying wolves; moving plea to cherish nature and all its resources

Clayton, Donald D. THE DARK NIGHT SKY: A PERSONAL ADVENTURE IN COSMOLOGY. Quadrangle, 1975. 206 p. $9.95. shs

Informal essays discussing various phases of the author-astronomer's life or the emotional and factual interrelations of some problem in cosmology; advanced level of discussion, some complex scientific concepts, and sophisticated vocabulary make for difficult reading--the results are well worth the effort; Clayton ponders the mute evidence of Stonehenge, pays tribute to Copernicus, Kepler, and Newton, offers some after-thoughts on Loys de Cheseaux, considers Einstein's principles of relativity and equivalence, even marvels over the brilliant implications of the film, 2001: A SPACE ODYSSEY; sensitive, fascinating; motivated science students will close this one with a new understanding of the astronomer and problems confronting him

Cobb, Vicki. MAGIC...NATURALLY! SCIENCE ENTERTAINMENTS AND AMUSEMENTS. Lippincott, 1976. 159 p. $5.95. $2.95 paper. elem jhs shs

Thirty magic tricks using everyday household items--paper, catsup bottle, pitcher, matches, raisins, etc.; well organized into major categories of mechanical, fluid, energy, chemical, perceptual effects, with each chapter explaining scientific principle applied, materials needed, directions for performing trick; well illustrated with black-and-white drawings; safety tips and warnings given where necessary

Condit, Martha Olson. SOMETHING TO MAKE: SOMETHING TO THINK ABOUT. Four Winds, 1975. 39 p. $4.95. prim-3 elem

An 'environmental' book using simple crafts techniques to focus youngsters' interest on animals, plants, etc.; we usually don't review these hyper-instructive, cut-and-paste books (children can come up with better things on their own); however, there is instructive material here in an approach that might work; secretly, we believe that once the child has made the toy, he'll forget all about the 'learning'; however, some fresh ideas for teachers of little folks in a combination crafts/science mode. J.H. (This item also appears on the Cultural Arts Advisory List.)

Couffer, Jack and Mike. AFRICAN SUMMER. Putnam, 1976. 95 p. $6.95. jhs-7

Experiences of the teen-aged children of animal trainers, photographers, and film crew of TV series, BORN FREE; should interest students who like animals and adventures; illustrated with excellent black-and-white photographs and drawings. (This item also appears on the Social Studies Advisory List.)

Couffer, Jack and Mike. GALAPAGOS SUMMER. Putnam, 1975. 96 p. $6.95. jhs shs

Vivid account of a boy's summer adventure in Galápagos Islands where Charles Darwin collected information documenting his ORIGIN OF THE SPECIES; nature photographer, Jack Couffer, and his 11-year-old son, Mike, take turns narrating account, with Mike's comments set off in italics; describes days with various animals--seals, porpoises, iguanas, birds--visits to volcanic caves, scientists, laboratories; engaging text spiced with humor; excellent, well-selected photographs of the trip; useful for in-depth or introductory study of islands which were so important in developing a major biological concept; thoroughly readable, delightful introduction to Galápagos. (This item also appears on the Social Studies Advisory List.)

Cowden, Jeanne. FOR THE LOVE OF AN EAGLE. McKay, 1976. 165 p. $9.95. jhs shs

The author's report of activities and adventures experienced while studying South Africa's black eagle in a wealth of information on the species; Arthur Bowland, chief photographer for the NATAL MERCURY, accompanied Cowden and filmed eagles in their natural habitat, producing a 25-minute documentary (also entitled "For the Love of an Eagle"); a portion of Cowden's account first appeared in October, 1969 NATIONAL GEOGRAPHIC magazine; includes a rambling narrative of the life of an eagle family from nest to mature eagle; many black-and-white and color photographs; an impressive plea for preservation of this species

Curtis, Robert H., M.D. MEDICAL TALK FOR BEGINNERS. Messner, 1976. 96 p. $6.29. prim-3 elem

Dictionary of medical terms encountered on TV medical shows, in books, in hospitals, on visits to doctor pertaining to human body and its systems, to illnesses, injuries, surgery; simple definitions and explanations; cross-referencing gives terminology used by layman and professional--"charley horse. *See* spasm." "pink-eye. *See* conjunctivitis."; clearly labeled diagrams of body parts and systems involved in medical procedures, such as blood pressure check, intravenous feeding, administering an EKG; good resource for remedial secondary students

Dalton, Stephen. BORNE ON THE WIND: THE EXTRAORDINARY WORLD OF INSECTS IN FLIGHT. Reader's Digest Pr., 1975. 160 p. $18.95. jhs shs

Photographic essay on uniqueness, ingenuity, beauty of insects; superb photography showing actual wing beats in close-up detail; 74 magnificent colorplates clearly identified in related section; introduction compares airplane, bird, and insect; describes each order of insects, relating method of reproduction, food habits, and flight mechanisms; excellent for in-depth study of insects with emphasis on flight; uses scientific names of insects, but fails to supply pronunciation key; superb color and black-and-white photographs and diagrams; special section on author's photographic techniques

de Paola, Tomie. THE CLOUD BOOK. Holiday, 1975. 32 p. $6.95. prim elem-4

Such a colorful, fun introduction to 10 common clouds, with all sorts of interesting tidbits along the way; full-color illustrations on every page manage to be both droll and informative; types of cumulus and stratus clouds and high cirrus clouds explained and illustrated; cloud names and interpretations from other lands enliven text and help secure terminology, definitions in budding memories--"banner" and "boa" to describe clouds atop tall mountains, "mares' tails" to describe white, feathery cirrus clouds, "mackerel sky" to describe small, fleecy cirrocumulus clouds; old sayings, weather folklore charmingly interspersed ("Mackerel scales and mares' tails/ Make lofty ships carry low sails"); simple index of the 10 cloud terms; a book for eager young minds and less motivated ones too; delightful addition to science collections

Devereux, Frederick L., Jr. HORSES. Watts, 1975. 66 p. $3.90. elem jhs-7

Bits of information about many aspects of horses from the first horses to kinds, colors, body parts, markings, breeds, special names, gait, equipment, horse sports, and horse's part in history--owned by famous men, fighting wars; for those with special interest in horses who desire to know more; photographs and drawings

Durden, Kent. FLIGHT TO FREEDOM. Bantam, 1974. 155 p. $1.25 paper. jhs shs

Story of Lady, a golden eagle, who lives as a wild, free bird after 16 years in captivity; with Patu, her mate, she nests and raises two eaglets, encountering numerous dangers daily; not only tells of these and other raptors but also gives interesting accounts of varied wild creatures affecting Lady's life--e.g., goats, racoons, cougars, deer; sequel to GIFTS OF AN EAGLE, this book will appeal to all nature lovers and anyone who likes a different kind of adventure in an inviting, flowing text; beautifully illustrated in pen-and-ink drawings

Facklam, Margery. FROZEN SNAKES AND DINOSAUR BONES: EXPLORING A NATURAL HISTORY MUSEUM. Harcourt, 1976. 114 p. $6.95. elem jhs

Well-written explanation of how a museum is put together and operated; organizing activities reviewed from collecting to preparation to exhibit design and educational programs; quality, clearly captioned photographs; bibliography and index

Farrar, Richard. THE BIRDS' WOODLAND: WHAT LIVES THERE. Coward, 1976. unp. $4.99. elem jhs

Describes feeding habits and territories of common birds of northeastern forest; fundamentals of food chain explained in simple language and information provided on niches occupied by hawks, ovenbirds, vireos, pee wees, woodpeckers, creepers, and warblers; William Douney's delicate pen drawings call forth respect and awe; excellent addition to science collections

Fegely, Thomas D. WONDERS OF WILD DUCKS. Dodd, 1975. 80 p. $4.95. elem jhs shs-10

In-depth study of wild ducks of North America giving basic characteristics, courtship behavior, nesting, care of young, feeding habits, predators, diseases, and pollution effects; migratory habits discussed and illustrated with black-and-white photographs and diagrams; conservation methods emphasized; detailed information on surface-feeding duck (mallard), diving duck (big necked), mergansers, stiff-tailed ducks, tree ducks, and some visitors from other continents; excellent resource

Ferrier, Lucy. DIVING THE GREAT BARRIER REEF. Troll, 1976. 32 p. $4.89. elem

Vivid photographs and concise text in interesting survey of life forms found in Great Barrier Reef where corals have built an enormous chain of islands which are connected with underwater beds of coral harboring many forms of marine animals; sharks, stingrays, fish sponges, oysters, and giant starfish inhabit warm waters in lagoon between reef and mainland; consider as second purchase for elementary school libraries

Fisher, Aileen. ONCE WE WENT ON A PICNIC. Crowell, 1975. unp. $7.25. prim elem-4

Beautifully blended combination of poetry and natural history; superb, full-color illustrations by Tony Chen will captivate young readers and nonreaders alike; rhyming text about young children who go on a picnic and all the marvels of nature they encounter en route--"And then...in a crack in the pavement/ we saw an earthy hole/ too tiny for a chipmunk,/ too tidy for a mole"; the children examine everyday creatures and beauties from beetles to day lilies; detailed close-ups of June bugs, earwigs, yarrows, joe-pye weeds,

ONCE WE WENT ON A PICNIC. (Cont'd)

lady slippers, centipedes--just every little form of life that dwells in snug, overlooked places; a treasure of vivid pictures; fine read-aloud; map at end identifies all creatures and plants along the children's way; visual and scientific delight for little ones! Don't overlook this purchase for science uses too. (This item also appears on the Languages and the Kindergarten-Early Childhood Education Advisory Lists.)

Flanagan, Geraldine Lux, and Sean Morris. WINDOW INTO A NEST. Houghton, 1975. 96 p. $7.95. jhs shs

Almost day-to-day or week-by-week journal of private lives of a family of blue tits; contains a black-and-white photographic record of significant events in lives of birds from beginning of their courtship in late winter, through selection of nesting box, building nest, mating, incubating eggs, feeding young, and deserting nesting box after fledglings are strong enough to fly away; highly motivating book; appropriate for natural science, biology classes, and bird watchers

Fox, Dr. Michael W. BETWEEN ANIMAL AND MAN. Coward, 1976. 223 p. $8.95. jhs-9 shs

Study of similarities and differences in behavior patterns of man and animals, and influences of nature and culture on behavior; beginning with human beings' basic physiological and emotional needs, text cites examples to illustrate same needs in animals, comparing love, dominance, submissiveness, aggression, sexuality, and similarities in behavioral patterns among animals and man; points out that racial differences rather than ideas of racial superiority benefit the species, emphasizing nature's beauty and orderliness; many black-and-white photographs; straightforward text; Dr. Fox is Director of Institute for Study of Animal Problems of Humane Society of U. S., a veterinarian and psychologist, and author of several books, including UNDERSTANDING YOUR DOG and UNDERSTANDING YOUR CAT. (This item also appears on the Social Studies Advisory List.)

Freedman, Russell. GROWING UP WILD: HOW YOUNG ANIMALS SURVIVE. Holiday, 1975. 64 p. $5.95. elem

Traces early life of six animals--tadpole (amphibian), rattlesnake (reptile), bald eagle (bird), and beaver, lion, and gorilla (mammals); animals chosen range from those that are independent at birth to mammals which have maximum parental protection and guidance; text is written as fictional narrative told by the animal itself and is thus easy for young readers; only illustrations are charcoal drawings at the head of each chapter

Friedman, Judi. THE BITING BOOK. Prentice, 1975. unp. $5.95. prim elem-4

Well-illustrated book explaining why animals bite--to eat, to fight, to show affection, and to survive; main point is that they nearly always bite human beings by mistake or to protect themselves and their young, not just to be vicious; teaches the functions of animal teeth and the why of related animal behavior; useful for introductory or summary purposes. (This item also appears on the Kindergarten-Early Childhood Education Advisory List.)

Gallant, Roy A. HOW LIFE BEGAN: CREATION VERSUS EVOLUTION. Four Winds, 1975. 214 p. $7.95. jhs shs

The creation vs. evolution controversy provides a perpetual discussion topic in the classroom; this thoughtful treatment of the issue is designed for those who haven't made up their minds; begins by tracing historical development of numerous theories about creation and evolution; later chapters document scientific discoveries which led to theory of evolution and more recent evidence on beginnings of life; with the evidence in hand, Gallant presents positions and arguments offered by both creationists and evolutionists; finally, Gallant looks at possibility of life on other worlds and effect of such a discovery on the debate; in total, one must conclude that the book sides with evolutionists, but in doing so the author provides one of the very few objective, unemotional expositions of arguments for both sides of controversy

Gans, Carl. REPTILES OF THE WORLD. Bantam, 1975. 159 p. $1.95 paper. shs

Paperback guide to reptiles of the world, including turtles, lizards, crocodiles, and snakes; excellent color photographs of animals aid identification; paragraph descriptions indicate native habitats and characteristics; for advanced studies in biology

Gemming, Elizabeth. MAPLE HARVEST: THE STORY OF MAPLE SUGARING. Coward, 1976. 47 p. $5.95. elem jhs

Examines both modern techniques and folkways of making maple syrup in information on tapping trees, evaporating excess water from maple sap, and using finished product; recipes for old-fashioned New England baked beans and maple baked ham included; black-and-white photos and drawings throughout; appealing text of much historical value; consider as a second purchase for middle grades/junior high school libraries. (This item also appears on the Social Studies Advisory List.)

Gergely, Tibor. ANIMALS: A PICTURE BOOK OF FACTS AND FIGURES. McGraw, 1975. 47 p. $5.72. elem jhs-7

Picturesque presentation of vast amount of information about animals--habits, size, habitats, migration; comparisons shown in speed, size, flying, swimming, and range of migration; profusely illustrated in detailed watercolors drawn to scale; animals depicted against maps showing where they live; reading is easy with only minimal text on page

Gibbs, Tony. NAVIGATION: FINDING YOUR WAY ON SEA AND LAND. Watts, 1975. 88 p. $4.33. elem jhs shs

This is the beginner's rock-bottom beginning book of navigation--nothing taken for granted in introducing student to subject; maps, navigation systems, and simple methods all discussed; simply written, quite well illustrated; although it will not teach readers how to navigate, it will provide them with basic knowledge needed to begin studying subject

Gillie, Oliver. WHO DO YOU THINK YOU ARE? MAN OR SUPERMAN--THE GENETIC CONTROVERSY. Sat. Rev. Pr., 1975. 255 p. $8.95. shs

Explores assumptions about "Who am I?" in relation to heredity and environment; discussion involves concepts of superperson and sociological influences and visions of change intertwined with human behaviors; author's thesis is his

WHO DO YOU THINK YOU ARE? MAN OR SUPERMAN--THE GENETIC CONTROVERSY. (Cont'd)

response to title's question: each person can be what he determines to be, given equal environmental opportunities; key references include genetics, heredity, destiny, reference, behavior, intelligence; interesting reading, thought-provoking information and theories; extensive notes; indexed

Glasser, Ronald J., M.D. THE BODY IS THE HERO. Random, 1976. 248 p. $8.95. shs

Few, if any, books explain the chemistry of the body with the clarity and varied style of this one; beginning with the stumbling discoveries of early physicians, Ronald Glasser leads the reader step by step through the discovery of our body's immune system explaining its functions, illustrating its capabilities while also exposing medicine's major internal professional problem--the human ego; the casual science reader, the student of biology or medicine, and teachers will be intrigued

Goldstein, Philip and Margaret. HOW PARASITES LIVE. Holiday, 1976. 189 p. $6.95. elem jhs shs

Interesting information about parasites, internal and external, bringing out little known historical information about each parasite discussed, describing parasites' life cycle, noting that some parasites can be either destructive or beneficial--e.g., acid from gibberellin fungus stimulates healthy growth in plants if administered in small enough dosage, a few grains of ergot fungus strengthens a woman's uterine contractions for a safer delivery; drawings and photographs illustrate various parasites; includes additional sources and index

Gribbin, John. FORECASTS, FAMINES, AND FREEZES: CLIMATE AND MAN'S FUTURE. Walker & Co., 1976. 132 p. $8.95. shs

Examines large-scale changes in the world's climate and their devastating effects on mankind's welfare; covers such topics as previous climate changes, ice cover and global weather shift, long-term climatic trends, limitations of forecasting techniques, and the effect of climate changes on the world's food supply; limited number of illustrations, but each is clear and specific; small print and technical style restrict text to interested, accelerated students

Harris, John, and Aleta Pahl. ENDANGERED PREDATORS. Doubleday, 1976. 84 p. $5.95. jhs shs

Instead of a biology text on endangered predators, this book is a series of five stories featuring different animals--fox, wolf, mountain lion, coyote, and bobcat--who illustrate the important role predators play in the ecological web; although stories are fictional, Yip the coyote or Torch the fox could be real-life predators so accurately and credibly are they depicted in their habitats, their daily routines, their relationships with their own species and other animals, their confrontations with danger, etc.; soft, delicate black-and-white drawings capture the appealing side of these common American predators; some prejudice for wolves evident but not distracting; convincing plea for preservation of endangered species in attractive presentation

Hess, Lilo. SMALL HABITATS. Scribners, 1976. 49 p. $5.95. jhs shs

A guide to establishing and maintaining aquariums and terrariums; information on needs of plants and animals for survival in enclosed environment, and suggestions on selecting various plants and animals for different kinds of mini-habitats; illustrated with photographs of common types of plants and animals adaptable to vivariums; expensive item

Hogg, Helen Sawyer. THE STARS BELONG TO EVERYONE: HOW TO ENJOY ASTRONOMY. Doubleday, 1976. 274 p. $12.50. jhs shs

Interesting, easy introduction to art and science of astronomy; covers all generally accepted topics in conversational style, converting dry facts into interesting reading; mathematics avoided in simple explanations; all sorts of astronomical issues engaged in--how long will the sun last? What are pulsars, black holes, supernovas? What is the most distant object visible without a telescope? A variety of wide-ranging celestial topics to please astronomy fans; appendices list addresses of amateur organizations, planetariums, and observatories, contain a celestial log, explain how time can be figured when the Big Dipper is used as a sky clock on a clear night, identify bright stars and constellations which provide a reliable timepiece, compass, and calendar, and provide a supplementary reading list; indexed

Holmes, Sandra. TREES OF THE WORLD. Bantam, 1974. 159 p. $1.95 paper. shs

Excellent, most attractive handbook on trees of the world, enhanced by 185 full-color photographs identifying them and concise paragraphs describing them; includes brief introduction on growth of trees, formation of wood, climax vegetation, and forest zones; outstanding color photographs assist in identification of each genus or species described in carefully researched text; forest trees, orchard trees, garden trees included; small format; for high school biology students

Jacobson, Morris K., and Rosemary K. Pang. WONDERS OF SPONGES. Dodd, 1976. 79 p. $4.95. jhs shs

A natural history of sponges, describing structure and characteristics, cellular structures, defense mechanisms, reproduction, and peculiarities; black-and-white photographs and drawings illustrate different species of sponges and porous structure of animals' bodies; glossary of technical and scientific terms assists in understanding vocabulary; for junior and senior high school students of biology and marine science

Jenkins, Marie M. KANGAROOS, OPOSSUMS, AND OTHER MARSUPIALS. Holiday, 1975. 160 p. $6.95. elem jhs shs-10

In-depth survey of present-day marsupials, emphasizing American opossum and Australian marsupials; traces pouched mammals' evolution through millions of years, bringing readers up-to-date on kangaroos, quolls, wuhl-wuhls, pouched wolves, bandicoots, koala bears, wombats, wallabies, and more; continental drift theory offered to explain locations where marsupial is generally found; detailed descriptions of various Australian marsupials; well organized, good print, wide margins; soft black-and-white drawings; extensive index; excellent Suggested Reading list (even lists specific magazine articles on marsupials); ideal for comprehensive study of marsupials or special student projects

Jones, Hettie. HOW TO EAT YOUR ABC'S: A BOOK ABOUT VITAMINS. Four Winds, 1976. 84 p. $7.95. prim-3 elem

Basic information about importance of vitamins for life support and necessity of proper diet for growth and health; discusses each vitamin individually and gives brief statement about the vitamin's discovery, the body's need for the vitamin, how it affects the body, abnormalities/diseases related to its deficiency, and vitamin's importance in relation to other vitamins; practice exercises in planning a balanced diet presented in "problem-solving" format. (This item also appears on the Health, Safety, and Physical Education Advisory List.)

Kaufmann, John, and Heinz Meng. FALCONS RETURN: RESTORING AN ENDANGERED SPECIES. Morrow, 1975. 128 p. $5.95. elem jhs shs

Intriguing study of life-style of peregrine falcons and their training for falconry; also the story of a biologist's determination to increase population of this species; detailed information in engrossing style; excellent in-depth information; numerous, clear black-and-white captioned photographs; bibliography, index

Kellner, Esther. ANIMALS COME TO MY HOUSE: A STORY GUIDE TO THE CARE OF SMALL WILD ANIMALS. Putnam, 1976. 160 p. $7.95. elem-6 jhs

Information on care of small wild animals, including foods baby animals eat and recipes for making nourishing foods which they will eat; based upon author's experiences in actual care of sick and injured baby wildlife; includes stories about 'possums, groundhogs, squirrels, rabbits, and racoons; concludes with information on releasing wild animals from captivity; indexed

Kettelkamp, Larry. A PARTNERSHIP OF MIND AND BODY: BIOFEEDBACK. Morrow, 1976. 96 p. $5.21. jhs shs

Introductory presentation on biofeedback illustrated with black-and-white photographs of actual test patients; emphasis not on novelty of such experiences, but rather on important medical and psychological uses; written at a comfortable reading level, presenting just enough material to spur interest; recounts experiments with heart rate, blood pressure, body temperature, muscle contraction, and brain-wave frequency; well organized, attractive, accurate; indexed

Kraske, Robert. IS THERE LIFE IN OUTER SPACE? Harcourt, 1976. 85 p. $6.95. jhs shs-10

More speculation on possibility of intelligent life existing in other places of universe besides earth; examines the nature of life, the formation of solar system and galaxies, circumstantial evidence and scientific calculations of life forms elsewhere that have sought to communicate with earth; cites examples ranging from ecclesiastical leaders to American astronauts who believe in extraterrestrial life; bibliography of related publications; photographs and drawings

Lavine, Sigmund A. WONDERS OF HERBS. Dodd, 1976. 64 p. $4.95. elem jhs shs

Concise history of selected herbs, their use, cultivation, propagation, and harvest; includes herbs used as food, condiments, medicines, and cosmetics;

WONDERS OF HERBS. (Cont'd)

also gives tidbits of lore associated with herbs in Bible, legend, and literature; attractive, clearly and simply written; black-and-white photographs aid identification; appropriate for intermediate grades and up

Laycock, George. THE BIRD WATCHER'S BIBLE. Doubleday, 1976. 207 p. $2.95 paper. jhs shs

Helpful information designed to make bird watching more enjoyable--identification of birds and their adaptations, migrating habits, problems they face, and some legal actions taken to protect them; much of the book is devoted to suggestions for better bird-watching techniques and bird photographing tips; directions for building blinds, nesting boxes, and feeding stations; some more common birds described are accompanied by pictures in black and white; 32 color and 205 black-and-white photos of birds; indexed; well bound, dark print, fairly large format

Lee, Albert. WEATHER WISDOM: BEING AN ILLUSTRATED PRACTICAL VOLUME WHEREIN IS CONTAINED UNIQUE COMPILATION AND ANALYSIS OF THE FACTS AND FOLKLORE OF NATURAL WEATHER PREDICTION. Doubleday, 1976. 180 p. $6.95. jhs shs

Collected knowledge about the atmosphere preserved in folktales, customs, and sayings; Albert Lee combines basic, simplified discussion of weather with hundreds of bits of folk wisdom in informative, useful book; chapters on sky colors, clouds, winds, interpreting the night sky, animals' sensitivity to weather changes, and much more; American weather wisdom dating from Indians, early settlers, farmers, sailors, pioneers; comprehensive, entertaining, packed with facts and some fancy; pen-and-ink drawings and diagrams throughout; every earth science teacher can make good use of this book

Lewin, Roger. IN DEFENSE OF THE BODY: AN INTRODUCTION TO THE NEW IMMUNOLOGY. Anchor, 1974. 146 p. $2.50 paper. shs

Thorough, factual text that is well organized and enjoyable, bringing readers up to date, as of 1974, on immunology information and questions; explores secrets of human immune system's success: its "memory," specificity, and ability to recognize foreignness; then strives to stimulate thinking regarding the system's failures: autoimmune diseases, cancer, immunodeficiency diseases; cites doctors and scientists who have contributed to discoveries in immunology; fascinating reading, particularly the chapter on relationship between cancer and the immune response and body transplants and the immune response--scientists, of course, would like to encourage our bodies to accept transplants and reject cancer; fair, objective analysis; some background in basic human anatomy/physiology needed; consider for advanced high school students in biology, anatomy and physiology; excellent resource for independent study

Lewin, Roger. THE NERVOUS SYSTEM. Anchor, 1974. 110 p. $1.95 paper. shs

Detailed information on human nervous system based on most recent research; particular emphasis on communication purposes of nervous system and mechanics of the system enabling it to achieve communication; quite a bit of the book speaks to the way individual neurons work; architecture of nervous system well explained; many experiments and individual doctors and scientists cited; readers interested in human anatomy/physiology will find this a resource for understanding detailed structural analysis and many functions of human nervous

THE NERVOUS SYSTEM. (Cont'd)

system; some background in biology and anatomy/physiology needed; excellent resource for independent study; readable, enjoyable, but definitely requires scientific background in subject

Lilly, John Cunningham, M.D. LILLY ON DOLPHINS: HUMANS OF THE SEA. Anchor, 1975. 500 p. $3.50 paper. shs

Presentation of much dedicated research on the dolphin, who Dr. Lilly feels is mankind's cognitive equal; although Lilly has been criticized for over-zealous efforts to prove dolphins' mental superiority, his research--infinitely detailed and substantiated--is fascinating; Lilly traces dolphin's role in history, elaborates on mental capacities, describes dolphin's "language," etc., drawing his conclusions from firsthand observations after working closely and daily with dolphins; a detailed, loving account which, whether one subscribes to all of Dr. Lilly's theories or not, will inspire respect and affection for these irresistible mammals

Limburg, Peter R., and James B. Sweeney. 102 QUESTIONS AND ANSWERS ABOUT THE SEA. Messner, 1975. 128 p. $6.64. elem-6 jhs shs

What makes the sea salty? What makes waves? What is an ocean current? What's the difference between a dolphin and a porpoise? These, plus 98 other questions about the sea, are answered in this interesting little book. Written in simple, straightforward language, answers are brief, yet concise, thorough. Well illustrated with photographs, maps, and diagrams.

Limburg, Peter. WHAT'S-IN-THE-NAMES OF BIRDS. Coward, 1975. 191 p. $5.49. elem jhs

Historical background of names of 48 familiar birds native to U. S.; habits and folklore associated with birds also examined; alphabetically arranged chapters range from "Blackbird," "Blue Jay," and "Buzzard" to "Whippoorwill," "Woodpecker," and "Wren"; not at all dull and scientific--spritely text and accurate, engaging pen-and-ink sketches; we learn history of such phrases as "the bluebird of happiness," "cooking his goose," "lame duck," and "going cuckoo"; all sorts of interesting tidbits of information in lighthearted potpourri of bird facts and fancy

Linn, Christopher. THE EVERGLADES: EXPLORING THE UNKNOWN. Troll, 1976. 32 p. $4.89. elem jhs

An ecological study of the Everglades community for young readers; explains the delicate balance existing among swamp life forms and the niches that birds, mammals, reptiles, and other Everglades creatures have created for themselves in their watery community; even native Seminole Indians included as part of the cycle of life in the natural community; superb color photographs on every page supply almost as much information as text; easy reading, high-interest material for students in middle grades

Liston, Robert A. PROMISE OR PERIL? THE ROLE OF TECHNOLOGY IN SOCIETY. Nelson, 1976. 160 p. $6.95. shs

Delves into the promise and the peril that technology and science pose for civilization; food shortages, resource mismanagement, overuse of the land,

PROMISE OR PERIL? THE ROLE OF TECHNOLOGY IN SOCIETY. (Cont'd)

pervasive poisons, population control, and other problems discussed, always with a view to their place in overall picture of society's progress; no illustrations; indexed; easy reading which should promote wide-ranging discussion in environmentally oriented science or social studies classes. (This item also appears on the Social Studies Advisory List.)

Lubell, Winifred and Cecil. EXPLORING A BROOK: LIFE IN THE RUNNING WATER. Parents, 1975. 64 p. $4.59. prim elem

Well-presented information on life in a brook recounted in storytelling format; tells about life in three parts of a brook--running, slow pool, and meadows; animals and plants, their habits and special adaptations vividly described; scientific terms spelled phonetically to aid pronunciation; interdependence of organisms highlighted, with emphasis on their peculiar body structure and functions allowing them to survive in their physical world; plants and animals described include algae, trout, damselflies, stone flies, and crayfish; many pleasant black-and-white sketches accented in greens and blues; indexed; useful for individual study or for reading by teachers or librarians to groups of pupils

Lyon, Jene. ASTRONOMY: OUR SUN AND ITS NEIGHBORS. Golden, 1974. 48 p. $3.95. jhs

Description of astronomical bodies and phenomena in our solar system; descriptive information on planets, meteors, moon, eclipses, formation of solar system, asteroids, and constellations; section on man-made satellites and space probes; vividly illustrated with colorful drawings, diagrams, and photographs of moon and other celestial bodies, all well integrated with content and fully labeled; for earth and space science students

MacKenzie, Andrew. RIDDLE OF THE FUTURE: A MODERN STUDY OF PRECOGNITION. Taplinger, 1975. 172 p. $8.50. shs

Interesting reading on the strange phenomena generated or transmitted by faculties generally referred to as ESP; MacKenzie has documented the case for precognition with many examples relating in extensive first-person detail vivid experiences substantiating the theory; these experiences are further corroborated by first-person testimony from people who confirm the facts as reported by the person who experienced the phenomenon; readable, unsensational, thoroughly entertaining; certainly skeptics cannot be offended by this mild, well-documented, lucid study; fascinating anecdotes and case histories of ESP experiences ranging from obscure, undramatic events in the lives of ordinary folk to precognitive warnings about the sinking of the Titanic, the Aberfan tragedy, and other famous incidents; not a treatise or tract in support of precognition, rather an open-ended (but convincing) presentation of case histories; guaranteed to engross

McNulty, Faith. WHALES: THEIR LIFE IN THE SEA. Harper, 1975. 88 p. $5.79. elem jhs shs-10

Excellent in-depth study of the great whale families, the baleen whales and toothed whales; their evolution, types, physiology, senses, life cycle, reproduction, habitats, and feeding explained; vivid descriptions of the sperm whale, dolphin, gray whale, and killer whale; new terms ("plankton,"

WHALES: THEIR LIFE IN THE SEA. (Cont'd)

"upwelling," "baleen") well defined as they arise in context; book makes strong plea for preserving this endangered, ever popular species; a few pen-and-ink sketches do not satisfy curiosity--photographs much needed

Major, Alan. COLLECTING FOSSILS. St. Martin's, 1974. 209 p. $8.95. jhs shs

Collecting fossils is a popular topic long in need of clear, concise treatment such as this; begins by explaining how to collect fossils, discusses fossil origin and time scales, and devotes major portion of volume to descriptions of fossil invertebrates and vertebrates; contains geographical time scale and stratigraphical column for British Isles, U. S. A. and Canada; also a quick glossary of some text terms; many pen-and-ink drawings, maps, and some good colorplates; well written; appropriate for students at or above eighth grade

Margolin, Malcolm. THE EARTH MANUAL. Houghton, 1975. 190 p. $5.95 paper. elem-6 jhs shs

A most readable and practical manual on how to preserve wild land or convert formerly abused land into wild land; no magic potions offered, just detailed explanations of various efforts and the results they will yield; among topics are tree cutting, mulch, erosion control, planting and pruning, ponds, and trails; author writes through the eyes of an educator who has spent many hours working with students in the woods; his teacher-oriented background is obvious in frequent little hints and comments that should be of enormous value to any teacher who works in outdoor education; attractive format; outstanding volume

Martin, Alice Fitch, and Bertha Morris Parker. ROCKS AND MINERALS: A GOLDEN *EXPLORING EARTH* BOOK. Golden, 1974. 48 p. $3.95. elem jhs

Covers fossils and minerals illustrating composition and uses, the three ways rocks are formed on earth, and rocks from space; also sections on black light, precious gems, and rock collecting; illustrations of volcano formation and action and of process of drilling for oil are especially interesting; color drawings throughout; no index or glossary

Marx, Robert F. THE UNDERWATER DIG: AN INTRODUCTION TO MARINE ARCHAEOLOGY. Walck, 1975. 250 p. $9.95. jhs shs

Thorough, clearly written treatment of marine biology covering research, search, excavation, dating, identification, and preservation techniques; excellent account of trials and tribulations of conducting the science of archaeology at sea, most particularly underwater; should be "must" reading for divers intending to make marine archaeology their career

Milne, Lorus J. and Margery. BECAUSE OF A FLOWER. Atheneum, 1975. 152 p. $6.95. jhs shs

Detailed coverage of well-known American flowers, including such flowering plants as blackberry, yucca, oak tree, and dandelion; describes each plant's method of pollinating and producing fruit and its special relationship to animal or physical substance; good information; further reading list; index; black-and-white charcoal drawings

Milne, Lorus, et al. THE SECRET LIFE OF ANIMALS: PIONEERING DISCOVERIES IN ANIMAL BEHAVIOR. Dutton, 1975. 214 p. $29.95. shs

Photographic essay on animal behavior examining the sensory system's computer capability, discussing responses to stimuli, instinctive migration habits peculiar to each species, survival techniques of non-migrating types--a squirrel lowers its heartbeat conserving body resources, groundhogs fatten up before hibernation--mating habits (both loving and lethal), parenthood--caring, indifferent, hostile--grouping habits, and parasites; introduction explodes many myths--lions revealed as clumsy hunters, not killer kings of jungle, ferocious gorillas unmasked as fearful vegetarians, so-called cowardly hyena's bold, ingenious killer instincts; 332 beautifully colored, revealing, detailed photographs, each carefully identified; indexed

Montague, Katherine and Peter. NO WORLD WITHOUT END: THE NEW THREATS TO OUR BIOSPHERE. Putnam, 1976. 319 p. $10. shs

Surveys the history of earth, relationships of its elements and the human body, and results of industrial progress on human longevity; suggests some changes possibly necessary to prevent destruction of biosphere; quotes many research findings; emphasizes dangers of using chemical pesticides soon ineffective because of tolerance developed by insects; relates deteriorating health conditions in United States to alterations in biosphere; footnoted excerpts from other publications, index, and bibliography of related literature

National Geographic Book Service. OUR CONTINENT: A NATURAL HISTORY OF NORTH AMERICA. Natl. Geog., 1976. 398 p. $9.80. shs

Comprehensive summary of the natural history of the earth, describing geological formation of North America, particularly American West and Middle West, and appearance of distinctive forms of animal life, reminding us that today's world is the same world which supported species long extinct; brief section on earth's formation, including continents, oceans, and principal land features; reviews principles determining formation, erosion, and reshaping of mountains; reconstructs history of life on earth from fossil evidence; examines living forms on earth today, placing them in their natural habitats; excellent color photographs, drawings, and maps; accompanying time wheel identifies life forms on earth from Precambrian period to present; thoroughly readable informal essays are engaging, searching, insightful, brightened by wit and warm reverence for life--never dull or pedantic; beautiful book; outstanding photography; accurate presentation of facts--a superb bargain at the price

Nolen, William A., M.D. SURGEON UNDER THE KNIFE. Coward, 1976. 223 p. $8.95. shs

Heart problems are most common physical ailments in United States today; in his newest book, Bill Nolen gives readers unusual perspective into complex world of heart surgery, describing his own heart problem, angina, and its diagnosis; he relates the decision to operate, using new technique of coronary bypass surgery, with all the accompanying anxiety and fear, allowing readers a new vision through the insight of a surgeon-patient; as story progresses, Nolen frankly discusses errors in his treatment and their potential for disaster, also pointing out advantages of modern surgical techniques with their life-giving potential for patients who only a few years earlier would have faced death or invalidism; simple, lucid, absorbing

Nourse, Alan E. VIRUSES. Watts, 1976. 65 p. $3.90. elem jhs shs-10

Clear, straightforward introduction to viruses and present knowledge about them; traces their discovery, describes how they produce disease, and explains vaccines and immunity; depicts chemical make-up of viruses and body's defense mechanism against virus invasion; modern virus research reviewed; black-and-white photographs and diagrams; suggested reading list; indexed; excellent middle-grade material

Oliver, A. P. H. GUIDE TO SHELLS. Quadrangle, 1975. 320 p. $9.95. jhs shs

Catalog of seashells which briefly reviews classification and description terminology; written descriptions of about 1200 species with color photographs of nearly 1,000; brief, lucid, little wasted space; extremely well-done photographs provide a major aid to users; most valuable for libraries in coastal areas or near other large bodies of water

Patent, Dorothy Hinshaw. PLANTS AND INSECTS TOGETHER. Holiday, 1976. 128 p. $5.95. shs

Explores various ways in which plants and insects depend on each other for food, protection, and reproduction; detailed descriptions of methods of carnivorous plants in capturing and digesting insects, galls and parasite insects on plants, and strange relationships of plants and ants; fine study of ecological interdependence of plants and insects--various mosses and lichens that grow on backs of insects, orchids that force bees to pollinate them, "gardener" ants that carry off leaves for their own purposes; concise and descriptive; well organized; labeled pen-and-ink drawings well placed to enhance text; excellent insight into plant/insect evolution and adaptation

Pavel, Frances K. ARCHELON AND THE SEA DRAGON. Childrens, 1975. 47 p. $3.95. prim elem-4

Skillful presentation of life cycle of now extinct giant sea turtles who lived during Age of Reptiles (dinosaurs); story-like text focuses on a marine turtle, appropriately called Archelon, who lived in present-day South Dakota, vividly describing Archelon's long, danger-fraught life as he competed for food, eluded the fierce Tylosaurus, struggled out from under devastating earthquakes, searched for water, and finally died after witnessing great natural changes to earth; method of incubating eggs and the compelling instinct to return to the sea after hatching especially well depicted; Archelon's experiences during formation of new mountains and destruction of old seas dramatically described; tortoise's peculiar self-protective adaptations emphasized throughout; excellent color illustrations by Jim Lamb greatly extend text; useful resource for lower elementary students interested in this creature and its survival millions of years ago

Penzler, Otto. HUNTING THE KILLER SHARK. Troll, 1976. 32 p. $4.89. elem jhs

Brief description of the white shark, popularly called man-eater or killer shark, in cursory coverage of shark's history, physiology, feeding habits, low intelligence, traveling companion (the pilot fish), and of course its enormous strength and speed; also briefly compares white shark to other sharks; profusely illustrated with color photographs; easy reading, high-interest material for students in middle grades--dramatic photographs and sketchy text

Perry, Richard. AT THE TURN OF THE TIDE: A BOOK OF WILD BIRDS. Taplinger, ____. 256 p. $7.50. jhs shs

Perceptive description of life and behavior of shore birds--wild geese, mallards, herons, terns, gulls; includes such topics as charm of the marshes, death of a graylag, winter on the saltings, and sea swallows; descriptions go beyond senses to sensitivity, all quite evocative; excellent bird book; additional information and author's theses appended; index; some pen-and-ink drawings; capable junior high school bird lovers will appreciate this book

Perry, Richard. LIFE IN FOREST AND JUNGLE. Taplinger, 1976. 254 p. $9.95. jhs-9 shs

Information on habits and adaptations of wild animals, birds, and insects, from scientific reports of social life of termites and ants to daily and seasonal activities of orangutans and chimpanzees; excellent presentation of selected wild animals in their natural surroundings; black-and-white drawings; bibliography; index

Piers, Helen. GRASSHOPPER AND BUTTERFLY. McGraw, 1975. unp. $5.72. prim

The life cycles of the butterfly and the grasshopper are subjects of this vividly illustrated little nature narrative about a young butterfly rescued by an aging grasshopper as summer wanes into fall; the two creatures' efforts to find Butterfly a safe winter haven provide the story line; almost photographic paintings of the natural world inhabited by bees, beetles, earwigs, ants, snails, etc., provide close-up details of hives, anthills, foxgloves, ferns, dandelion leaves, and other such miniature environments; difficult vocabulary ("chrysalis," "hibernate") for early-grade audiences; beautiful illustrations; a read-aloud book. (This item also appears on the Kindergarten-Early Childhood Education Advisory List.)

Poole, Gray Johnson. MISTLETOE: FACT AND FOLKLORE. Dodd, 1976. 62 p. $4.95. elem jhs shs-10

Summary of facts and fallacies about mistletoe, including information on number and variations in the 65 genera and 1300 species of mistletoe; describes growth and damage caused to the host by both leafy and leafless species; information on control measures and uses of mistletoe as food for birds and animals; myths and legends recounted; cites economic importance as a decorative plant and describes harvesting methods; contains questions of interest to scientists and suggestions for further research; attractive drawings enhance study of this popular Christmas symbol

Pringle, Laurence. ENERGY: POWER FOR PEOPLE. Macmillan, 1975. 147 p. $6.95. jhs shs

Surveys energy question, beginning with 1973 shortage and circumstances leading to that crisis; discusses kinds of energy--gasoline, natural gas, oil, atomic--stressing environmental concerns; suggests alternative energy sources, such as hydroelectric, geothermal, solar power; pleads for conservation consciousness; photographs, cartoons, diagrams; glossary, list of additional readings, and index

Rahn, Joan Elma. HOW PLANTS ARE POLLINATED. Atheneum, 1975. 135 p. $5.95. elem jhs shs

Thorough explanation of pollination process, beginning with detailed picture of

HOW PLANTS ARE POLLINATED. (Cont'd)

plant flower structure, moving into various methods of pollination--wind, bees, wasps, bats, water birds; well illustrated with drawings of specific flowers; suggests summer project for firsthand observation of pollination, giving clear instructions; glossary of terms, but no index

Remington, Jeanne E. INSECTS OF THE WORLD. Bantam, 1975. 159 p. $1.95 paper. shs

Guide to many common insects and insect-like animals; color photographs assist in identifying animals; text materials give descriptions and outstanding characteristics of each species; for biology students

Rey, H. A. FIND THE CONSTELLATIONS. Rev. ed. Houghton, 1976. 72 p. $3.95 paper. elem jhs

Simple drawings for teaching recognition of particular stars and constellations visible from middle and northern U. S.; first, the stars are pictured individually, then shown connected to form constellations, and finally constellations are depicted together to reveal sky views; a wealth of well-organized information; quizzes included for review; index, glossary, tables, and general sky chart; useful with younger children (who could not read text) and even as an introduction to astronomy for adults

Ridpath, Ian. WORLDS BEYOND: A REPORT ON THE SEARCH FOR LIFE IN SPACE. Harper, 1976. 176 p. $6.95 paper. shs

Synthesizes existing scientific knowledge in the quest to discover if life exists in outer space; facts and findings concerning planets, stars, galaxies; offers possibilities of presence of life in space by showing existing essential conditions; poses question of communication among planets; readable text in simple format, well illustrated with line drawings and photographs; suggested reading list and index

Riedman, Sarah R. FOOD FOR PEOPLE. 2nd rev. ed. Abelard, 1976. 228 p. $6.95. jhs shs

Diets of primitive man discussed and physiological action of the body on food presented in simple, straightforward manner; emphasizes importance of certain dietary elements and examines distribution of world's food supply; contains proposals for increasing food supplies and quality of food plants for future generations

Rinehart, Dr. John S. GUIDE TO GEYSER GAZING. HyperDynamics, 1976. 64 p. $1.40 paper. jhs shs

Numerous aspects of geysers, such as the what, where, why, and how of them, techniques in photographing them, effects of earthquakes and tidal changes, making your own geyser; brief, clear discussions, written to be understood; no photographs but numerous diagrams and charts do excellent job of clarifying written discussion; includes reading list

Ritchie, Carson I. A. MAKING SCIENTIFIC TOYS. Nelson, 1975. 169 p. $6.50. jhs

Collection of instructions for building over 70 simple toys which illustrate scientific principles; contains list of materials needed and illustrated

MAKING SCIENTIFIC TOYS. (Cont'd)

instructions; principles involved not explained in detail, but presentation is such that it will capture imagination of young experimenters who will then learn the principles through observation of effects produced by simple toys; divided into chapters related to optics, acoustics, electricity, weather, etc.; photographs, line drawings

Kothman, Joel. WHICH ONE IS DIFFERENT? Doubleday, 1975. unp. $6.95. prim-3 elem jhs

Designed to test one's visual discrimination, each page challenges young viewers with drawings of objects which are all identical--except one; ranging from difficult to complex, the puzzles sharpen visual acuity, provide entertainment; answers supplied on last pages; suitable for all groups, but format will discourage high schoolers

Ryden, Hope. THE WILD PUPS: THE TRUE STORY OF A COYOTE FAMILY. Putnam, 1975. unp. $6.95. elem

Describes habits and habitat of coyote family on Miller Butte in National Elk Refuge in Wyoming; colored and black-and-white photographs aid text in revealing courtship behavior, regurgitation of digested food for pups, playful games, and survival techniques; voices a protest against cruelties of trapping, poisoning, etc.; explains symbiotic relationship between ravens and coyotes; story of mother Redlegs, father Gray Dog, and their pups will both entertain children and provide valuable information about this wild species

Schlein, Miriam. GIRAFFE: THE SILENT GIANT. Four Winds, 1976. 58 p. $6.95. elem jhs

The development, physical characteristics, and behavior of giraffes in information on the okapi and giraffe, variations in physical markings of northern and southern specimens, their feeding habits, methods of protection, and dangers faced in their natural habitats; discredits common idea of their muteness, revealing giraffes as capable of making sounds; describes in detail a hunter killing a giraffe; encourages more respect for the animal and its survival; many pen-and-ink illustrations; indexed

Schnell, Donald E. CARNIVOROUS PLANTS OF THE UNITED STATES AND CANADA. Blair, 1976. 125 p. $19.95. jhs shs

A marvelous addition to information available on carnivorous plants; most books on this subject are either extremely technical treatises or mere collections of beautiful pictures--this volume strikes a balance between the technical and the beautiful; plant and habitat descriptions generally clear, with few undeciferable scientific terms; photographs combine obvious taste for the beautiful with unerring scientific accuracy; taxonomic descriptions include all major groups of carnivorous plants; following a chapter devoted to general nature of such plants, descriptive sections deal with Venus' flytrap, pitcher plants, sundews, butterworts, and bladderworts; excellent concluding chapter on growing and collecting carnivorous plants; appended are annotated Additional Reading list, glossary, explanation of scientific names (their derivations), and index; an extraordinary addition to any library or personal collection in biology

Schultz, Gwen. ICEBERGS AND THEIR VOYAGES. Morrow, 1975. 95 p. $5.11. elem jhs shs

Simple, clear description of how icebergs are born, move, change, and die; explains ways in which man uses icebergs--exported from Greenland as intriguing, unusual "singing" ice cubes, as vehicles for transporting aircraft, and, perhaps in the future, as freshwater supplies for dry areas; numerous photographs, a few diagrams; scientific terminology held to absolute minimum and general vocabulary restricted to level suitable for students with reading difficulties; indexed

Scott, Jack Denton. CANADA GEESE. Putnam, 1976. 64 p. $6.95. elem jhs

In-depth look at natural history of Canada goose in information on selection of a mate, feeding, incubation of eggs, growth of goslings, instinctive flight to wintering grounds, and communication among flock; black-and-white photographs show geese in flight formations, filling sky and marshlands; pictures also show nest, eggs, nestlings, and juvenile goslings; outstanding treatment of a very interesting species

Selsam, Millicent E., and Joyce Hunt. A FIRST LOOK AT SNAKES, LIZARDS, AND OTHER REPTILES. Walker & Co., 1975. 32 p. $5.39. prim

Well-illustrated, clearly written introduction to process of scientific classification through a study of reptiles; sharpens observation skills by requiring students to look for specific characteristics--e.g., characteristics of major groups, similarities and differences; concentrates on lizards, turtles, crocodiles, and alligators, along with subgroup of each major group; well-done introduction to scientific process for primary readers. (This item also appears on the Kindergarten-Early Childhood Education Advisory List.)

Serventy, Vincent and Carol. THE KOALA. Dutton, 1975. 80 p. $12.95. jhs shs

The teddy bear of our childhood in real life, caught here in excellent close-up photographs; the koala bear, timid and elusive, is depicted in text and pictures as he travels in his mother's pouch, eats his favorite gum leaves, plays with his furry friends high up in boughs of eucalyptus trees, sleeps in fork of a tall tree safe from his enemies, etc.; comprehensive study of this appealing marsupial which also compares and contrasts koala to other marsupials; reviews threats of extinction posed by fierce dingo, by clearing of forests as Australian settlers made a homeland, by mass slaughter of these creatures for their fur, by pesticides, finally bringing readers up-to-date on preservation efforts at last being initiated to protect these most winsome of shy creatures; a delight for animal lovers; one whole section of color photographs; small print; no index; engrossing subject matter; sharp, motivated middle graders could handle text as well as secondary students

Shuttlesworth, Dorothy E. PETS AND PEOPLE: HOW TO UNDERSTAND AND LIVE WITH ANIMALS. Dutton, 1975. 132 p. $6.95. elem jhs

Considers various types of pets, including cats, dogs, turtles, fish, birds, rodents, horses, insects, giving their history, providing information on body structure, behavior, and methods of caring for pets through specific instances of human-pet relationships; discusses pet population and control; black-and-white photographs; list of additional sources; index

Silverstein, Alvin, and Virginia B. Silverstein. ORANGES: ALL ABOUT THEM. Prentice, 1975. 90 p. $5.95. elem-6 jhs shs-10

Substantial information about oranges--history, legend and lore, where and how they are grown in U.S.A., various types, and tips on growing; includes recipes using oranges, as well as games and activities featuring them; purely decorative line drawings in black and white; indexed; ideal for in-depth look at oranges

Simon, Hilda. FROGS AND TOADS OF THE WORLD. Lippincott, 1975. 128 p. $6.95. elem-6 jhs shs-10

Summary of information on frogs and toads, their characteristics and habits, including little known species like the Catholic, or Holy Cross, frog of Australia, the South American horned frog, and the world's smallest frog--an elfin creature less than one-half inch in length called "Sminthillus limbatus"; all sorts of intriguing facts on evolution, habitats, protective devices, mating and hatching of eggs, dispositions, superstitions regarding frogs and toads, and more; for those who want an easy in-depth study of frogs and toads, this is an excellent selection; complemented by skillful, really lovely drawings; bibliography, index of scientific names illustrated in order of appearance, and general index

Simon, Seymour. THE OPTICAL ILLUSION BOOK. Four Winds, 1976. 78 p. $6.95. elem jhs

Introduces concept of optical illusions, explaining principle of eye and brain interaction, giving theory and examples of line/space illusions, of changeable figures, of depth and distance, of tricks played by brightness and contrast; chapter on color illusions requires readers to envision the colors (all illustrations are in black and white); final chapter illustrates concept as used by painters and artists; a fun book

Sullivan, James A. WHITEFOOT MOUSE. Coward, 1975. 47 p. $4.29. prim-3 elem jhs-7

Skillful presentation of common but rarely seen Whitefoot mouse depicted in black-and-white photographs of this night creature seen under dim red lights; hunting and eating habits revealed, along with grooming, mating, and social behavior (dispersal and grouping habits during cold weather); number and size of litters per year described; ideal for individual or in-depth study

Tarling, Dan and Maureen. CONTINENTAL DRIFT: A STUDY OF THE EARTH'S MOVING SURFACE. Rev. ed. Anchor, 1975. 142 p. $1.95 paper. jhs shs

Detailed, lucid examination of evidence and phenomena surrounding and supporting theory of plate tectonics (continental drift); discusses ancient life and environments, ancient climates, palaeomagnetism, ocean floor structure and motion, the timing of drift, and more; theories on cause of drift also discussed; supplemented with numerous diagrams, though few photographs; many difficult scientific terms and proper names may baffle weaker students or those less motivated; excellent for strong students who want to pursue this endlessly fascinating subject in depth

Tidwell, William D. COMMON FOSSIL PLANTS OF WESTERN NORTH AMERICA. B.Y.U. Pr., 1975. 197 p. $11.95. $7.95 paper. jhs shs

Because fossil plants are generally poorly treated in earth science books designed for average readers, this well-bound, handsome paperback is a welcome addition

COMMON FOSSIL PLANTS OF WESTERN NORTH AMERICA. (Cont'd)

to the literature; general introduction to fossil plants and life of the past is followed by discussion of collecting techniques, proceeding through the plant kingdom with sketches and descriptions of common plant species in each order; although plants described are native to Western locations, the book should be valuable in eastern United States also, as many of these species were widespread here during geologic periods in which they flourished; clearly written; extremely well illustrated with photographs and fine, detailed pen-and-ink drawings, all clearly, fully labeled; impressive section of color photographs gives close-up details of fossils; comprehensive glossary also illustrated; lengthy index is cross-referenced; much appended information in form of charts identifying leaf characteristics, outline keys to ferns and fernlike foliage, and selected reading on the topic; a fine, all-encompassing manual

Van Wormer, Joe. ELEPHANTS. Dutton, 1976. unp. $7.50. prim-3 elem jhs-7

Distinguished by many large, frequently full-page photographs in clear black and white, this simple, well-organized presentation on elephants is just right for middle graders; much information on anatomy, feeding habits, family relationships, reproduction, senses, and habitats; comparisons of Asian and African elephants; all sorts of interesting, vagrant tidbits concerning these rather peaceable creatures--did you know that an elephant cannot jump? Not even an inch?

Verrett, Jacqueline, and Jean Carper. EATING MAY BE HAZARDOUS TO YOUR HEALTH. Anchor, 1974. 229 p. $2.95 paper. shs

An outright indictment of Food and Drug Administration for what the authors consider its lackadaisical attitude toward dangers of food additives; former FDA scientist attests to ineffectual way in which agency handles food problems threatening consumers' health, even their lives; relates many incidents of back-room bargaining between food additive producers and government officials resulting in flagrant flaunting of laws and heedless disregard for consumer welfare; discusses potential danger of many chemicals and possible results of continued human consumption, citing research findings substantiating claims; quick-reference tables list foods high in additives; appendix gives "filth guidelines in foods"; bibliography and suggested readings for additional information on hazards of food additives; indexed; everybody should read it! (This item also appears on the Social Studies Advisory List.)

Villiard, Paul. THE HIDDEN WORLD: THE STORY OF MICROSCOPIC LIFE. Four Winds, 1975. 89 p. $6.50. shs

A microscopic view of some common items in everyday life, such as silk and nylon, insect wings and eyes, feathers, plant cells and structures, and microscopic life found in a fresh-water pond; includes instructions for taking pictures through a microscope; for high school biology students (grammatical error on P. 22: "a bacteria...")

Villiard, Paul. RAISING SMALL ANIMALS FOR FUN AND PROFIT. Scribners, 1973. 160 p. $3.95 paper. shs

Tips on raising all kinds of small animals from microscopic specimens to birds and fur-bearing animals; appealing style; attractive photographs; appropriate for high school students interested in establishing successful

RAISING SMALL ANIMALS FOR FUN AND PROFIT. (Cont'd)

business or raising animals--earthworms, mink, hamsters, partridges, or any number of other animals for which a ready market exists; appendix lists address in each of the 50 states for free information on wildlife laws, licenses, feeding and housing birds and animals; also lists regional offices of U. S. government and offices in Canadian provinces; indexed. (This item also appears on the Occupational Education Advisory List.)

Warner, Matt. REPTILES AND AMPHIBIANS. Golden, 1974. 48 p. $3.95. elem jhs

Describes two phyla of animals, amphibians and reptiles, comparing distinguishing characteristics of the two groups and providing information on habitats, feeding habits, reproduction, and peculiarities of many species in each group; color pictures assist in identifying species described; contains section distinguishing fact from fiction

Warner, William W. BEAUTIFUL SWIMMERS: WATERMEN, CRABS, AND THE CHESAPEAKE BAY. Little, 1976. 304 p. $10. shs

Firsthand account of author's year-long experience with men who make their living crabbing in Chesapeake Bay waters; describes physical structure of blue crabs, their habits of molting, mating, migration, etc., how they are caught, processed, marketed; introduces the watermen--honorable, hardworking, knowledgeable and resourceful, witty, strong, proud; celebrates the natural beauty of the marshland unspoiled by commercial developers; fascinating text for sea lovers and fishermen; charcoal sketches, line drawings, maps; annotated list for further reading and tips for visitors

Waters, John F. THE CONTINENTAL SHELVES. Abelard, 1975. 142 p. $5.95. elem jhs

Comprehensive physical description of continental shelves, historical value, methods of exploring, man's need for shelf animals and their products--life-saving drugs to battle leukemia and heart disease, to help clot blood, produce vitamins, etc.; alerts readers to dangers of overfishing, pollution, and urges reverence for seaweed products--iodine, potash, countless uses of algin substance; urges further exploration of shelves for water and energy source, for minerals--gold, silver, copper--for oil and natural gas; pleads for systematic sea farming toward guaranteed harvest; excellent introduction for beginning students of oceanography; list of further reading; good, clear photographs

Webster, David. SCIENCE PROJECTS WITH EGGS. Watts, 1976. 61 p. $4.90. elem jhs

Illustrated with black-and-white photographs and drawings, this interesting book on eggs, their physiology and anatomy, describes a number of experiments that can be done with eggs to support science facts presented; useful text for an interest center with eggs provided, or as a resource for science projects; additional information needed at certain levels, and more experiments would have been helpful; low reading level and appealing illustrations make the book adaptable to many grade levels

Weiner, Michael A., et al. BUGS IN THE PEANUT BUTTER: DANGERS IN EVERYDAY FOOD. Little, 1976. 112 p. $5.95. jhs shs

Examines what has happened to pure foods in this developed nation; raises questions about what has been added or deleted from meats, vegetables,

BUGS IN THE PEANUT BUTTER: DANGERS IN EVERYDAY FOOD. (Cont'd)

dairy products, beverages, breads, etc., especially how such additions or deletions affect nutritive value of foods; question-answer style is clear, informative, easy to grasp; factual, stimulating information for readers concerned about nutritive value of foods with resulting effects on health; cartoon drawings accompany each chapter heading

Weiner, Michael A. MAN'S USEFUL PLANTS. Macmillan, 1976. 146 p. $6.95. jhs shs

Overview of useful plants, from cereals and other grains through legumes, nuts, root crops, sugar plants, fruits and vegetables, spices, and beverage plants; also looks at plants which yield medicines, tobacco and other stimulants, rope and fabrics, timber products, rubber, gums, dyes; information on their uses, natural habitats, cultivation, harvest, and methods employed in adapting plants or plant products to man's use; easy to read; indexed; attractive, well-organized publication

Weiss, Malcolm E. LANDS ADRIFT: THE STORY OF CONTINENTAL DRIFT. Parents, 1975. 64 p. $4.59. prim elem-4

Clear, simple explanation supporting continental drift theory; recounts historical background of the hypothesis, pointing out how asking questions of nature and posing tentative answers can lead to evidence substantiating hypothesis; idea that continents were once one great land mass which later drifted apart seems to be substantiated by looking at possible "fits"--e.g., South America's eastern shoreline "fits" into Africa's western shoreline--studying fossil remains of organisms unsuited for present climate at the location, observing rocks formed millions of years ago which, unlike recent rocks, lack magnetic north orientation, and studying ocean rifts at bottom of the sea; all of this based upon Ben Franklin's idea that inner part of earth is liquid; easy, well-illustrated introduction to the whole idea for primary-elementary students

Weiss, Malcolm E., and Ann E. Weiss. THE VITAMIN PUZZLE. Messner, 1976. 96 p. $6.29. prim-3 elem

Recounts 200-year history of vitamins in brief explanations of each known vitamin's discovery over the years, information on how vitamins work, and discussions of vitamin deficiency and dosage for proper vitamin intake; chart of vitamins lists "What It Does," "Deficiency Symptoms," and "Food Sources"; easy reading. (This item also appears on the Health, Safety, and Physical Education Advisory List.)

White, William, Jr. AN EARTHWORM IS BORN. Sterling, 1975. 80 p. $4.59. elem jhs shs-10

Nearly every student has been fascinated by the lowly earthworm at one time or another; this book traces earthworm's life cycle, describes its anatomy, and examines its habitat in simple, lucid style; directions also for studying earthworms in the wild and for construction of controlled habitats; well illustrated with both black-and-white photographs and diagrams; excellent resource for upper elementary and middle school students interested in nature study or searching for science project material

Wilbourn, Carole. CATS PREFER IT THIS WAY. Coward, 1976. 224 p. $8.95. jhs-9 shs

An account of cats treated in a veterinary hospital built just for cats and their response to people who worked with them; information on care and treatment, grooming, feeding, and peculiarities of individual cats; examines some psychological, or instinctive, reactions of cats and people and reactions which can be developed between them; written in conversational language inviting readers to become part of the action and enjoy a close, vicarious relationship with the cats, their doctor, and nurse; will be appreciated by cat lovers; many black-and-white photographs

Wilson, David. IN SEARCH OF PENICILLIN. Knopf, 1976. 306 p. $10. shs

Traces development of penicillin from discovery in 1928 to present; examines fallacy in Dr. Fleming's assumption when drug was first discovered and describes early methods of production during World War II; reveals importance of penicillin in developing chemotherapy as it is known today, placing it in same "wonder drug" category with sulphanilamide; even though discovered in 1928, penicillin was not used in medicine until 1940, for reasons explained; discusses challenge presented by discovery of penicillin and development of chemotherapy to produce new products which will overcome adaptations of resistant disease-causing microorganisms; excellent reading for highly motivated, capable senior high school students--certainly not for the average

Wilson, William F., et al. NORTH CAROLINA GEOLOGY AND MINERAL RESOURCES: A FOUNDATION FOR PROGRESS. N.E.R. (Division of Resource Planning & Evaluation), 1976. 78 p. $1 paper. jhs shs

Geological source book for North Carolina containing information on physiographical provinces of the State, its geological formations, and mineral resources; charts, tables, and drawings support text material; useful supplement to earth science study of North Carolina; will intrigue rock hounds and those interested in North Carolina minerals and mining industry

Wohlrabe, Raymond A. EXPLORING THE WORLD OF LEAVES. Crowell, 1976. 150 p. $8.50. shs

Comprehensive treatment of structure, shapes, and functions of leaves; includes drawings illustrating typical shapes of leaves--their bases, margins, and tips--typical cellular structure of a leaf, and structure of the mesophyll, epidermis, and guard cells; explains photosynthetic function of leaves; gives brief statement on early work of Linnaeus, world's greatest botanist, and foundation he laid for systematic classification of plants; large number of photographs show leaves and their adaptations to specific functions as well as to climatic and environmental conditions; indexed

Wood, Elizabeth A. SCIENCE FROM YOUR AIRPLANE WINDOW. Dover, 1975. 227 p. $3 paper. jhs shs

In a world where flying is common travel, this text offers new perspective for the traveler; Elizabeth Wood describes physical laws governing numerous physical phenomena that can be sensed or observed from an aircraft; chapters cover things to look for in taking off, looking at coastlines, light, clouds, rock structures, vegetation, flying at night, water, and when landing, to

SCIENCE FROM YOUR AIRPLANE WINDOW. (Cont'd)

name but a few; very little here about airplanes themselves, nor do chapters have to be read consecutively; well illustrated with both photographs and diagrams; interesting, informative introduction to commonly observable phenomena

Yalden, D. W., and P. A. Morris. THE LIVES OF BATS. Quadrangle, 1975. 247 p. $9.95. shs

Multifaceted discussion of bats, covering their origin and structure, flying mechanisms, feeding habits--some are meat eaters, some fish eaters, some feed on insects, others like flies; describes reproduction cycles, community customs, their highly developed echolocation abilities; enumerates ways in which bats are useful to man, particularly in scientific experiments concerning blood circulation, wound healing, reducing body temperature during surgery, improving sound sensitivity in blind people; includes guide on various families of bats; bibliography and index; diagrams and photographs

Zappler, Georg and Lisbeth. THE CHANGING SCENE: AN ECOLOGY STORY. Doubleday, 1975. 59 p. $4.95. jhs shs-10

Description of ecological relationships of plants and animals of past and present; describes interrelationships of living things in several different kinds of communities and climates; in an imaginary trip backward through time, text returns readers thousands and millions of years ago in history to examine relationships existing then; raises questions of what may be in the future; illustrated with unlabeled but appropriately placed drawings; nice overview for introductory purposes

Zappler, Lisbeth. THE NATURAL HISTORY OF THE NOSE. Doubleday, 1976. 64 p. $4.95. elem jhs

Traces development of noses from prehistoric fishes to modern mammals, covering primitive fishes, modern fishes, amphibians, reptiles, birds, and mammals, including primates; many appropriately located drawings illustrating shapes and special functions of noses; easy to read

Zim, Herbert S., and Lucretia Krantz. SNAILS. Morrow, 1975. 64 p. $4.59. elem jhs shs-10

Easy reading book gives detailed information about many types of snails--their habitats, life history, and body systems, including their peculiar method of reproduction; well illustrated with drawings, charts, and tables; fine selection for those pupils who would like to make an in-depth study or for the teacher who wishes to summarize a study of mollusks; indexed

Zim, Herbert S. THE SUN. Rev. ed. Morrow, 1975. 64 p. $4.59. elem jhs

Comprehensive information on the sun, its place among other stars, its chiefly hydrogen and helium makeup, and the nature of radiation it generates, among other topics; sun's influence on life depicted through green plants and fossil fish; radiant energy in form of visible light examined in detail; the absorption by earth, reflection from clouds, and color determination are other phenomena studied; a few activities suggested; indexed; excellent in-depth study for middle grades/junior high school

Books in a Series

THE ANIMAL FRIENDS BOOKS. Carolrhoda, 1976. unp. each $3.95. prim elem
Anders, Rebecca. DOLLY THE DONKEY
Anders, Rebecca. LORITO THE PARROT
Anders, Rebecca. WHISKERS THE RABBIT
Johnson, Sylvia A. DOWNY THE DUCK
Johnson, Sylvia A. PENELOPE THE TORTOISE
Johnson, Sylvia A. PENNY AND PETE THE LAMBS
Overbeck, Cynthia. CURLY THE PIGLET
Overbeck, Cynthia. SPLASH THE DOLPHIN
Overbeck, Cynthia. TIPPY THE FOX TERRIER
Pursell, Margaret Sanford. BOOTS THE KITTEN
Pursell, Margaret Sanford. MARIGOLD THE GOLDFISH
Pursell, Margaret Sanford. SPRIG THE TREE FROG

Excellent series devoted to large variety of animals children might encounter; well illustrated with drawings and black-and-white and color photographs; author captures attention in stories featuring children who own or observe the animals; two-page synthesis of facts concludes each book; valuable addition to collections

Day, Jennifer W. CHILD'S GOLDEN SCIENCE BOOKS. Golden, 1975. each 31 p. each $3.75. prim
WHAT IS A BIRD? WHAT IS A MAMMAL?
WHAT IS A FLOWER? WHAT IS A TREE?

Clear, vividly colored drawings of plants and animals highlight these simple Golden Press concept books introducing preschool and early primary children to biological classifications; detailed, full-color pictures of birds, flowers, familiar animals, and trees common to America are accurate and labeled; characteristics of each major group and subgroup briefly discussed; birds, mammals, etc., clustered together on a page are drawn approximately to scale, giving viewers good idea of their size; each creature depicted in a sketchy suggestion of his habitat--e.g., owls peer from black branches of a tall tree, a polar bear lumbers across a snowy expanse; appended word lists are divided by words that name, describe, or show action ("robin," "webbed," "dive"); a helpful note to parents and teachers concludes each book; appealing, visually delightful series which a young child will return to again and again

Gutnik, Martin J. FIRST EXPERIMENTS IN SCIENCE AND NATURE. Childrens, 1976. each $4.95. prim
HOW PLANTS ARE MADE. 43 p.
HOW PLANTS MAKE FOOD. 45 p.
WHAT PLANTS PRODUCE. 43 p.

Large, clear type and simple prose thumbmark these easy books for young children; all three texts explain and illustrate experiments for studying plant anatomy and physiology--dyeing a carrot disc to study its roots, sealing jars containing plants to observe plants giving off water through their leaves, dyeing a kernel of corn and some cornstarch with iodine to determine if both contain starch; step-by-step instructions with large illustrations of procedures; functions of plant cells and tissues, ways in which plants use carbon dioxide and water in conjunction with light to make food (photosynthesis), and ways in which plants produce oxygen and carbohydrates illustrated in varied experiments; most experiments require

FIRST EXPERIMENTS IN SCIENCE AND NATURE. (Cont'd)

adult supervision or special materials; similar experiments available from other sources in more detail, although most other such sources are for teacher use exclusively; useful addition to interest center with equipment for experiments provided

Johnson, Sylvia A. LERNER WILDLIFE LIBRARY. Lerner, 1976. each 28 p. each $4.95. all $29.70. elem jhs

ANIMALS OF THE DESERTS
ANIMALS OF THE GRASSLANDS
ANIMALS OF THE MOUNTAINS
ANIMALS OF THE POLAR REGIONS
ANIMALS OF THE TEMPERATE FORESTS
ANIMALS OF THE TROPICAL FORESTS

Introduction in each book examines terrain, climate, and vegetation of habitat in which animals live; one-page description of each of 10 animals explains food habits, reproduction, survival methods, and other pertinent characteristics; full-page, colored drawing faces each description; map (unfortunately not labeled) shows distribution of each animal and a comparative chart indicates each animal's relative size; large print, attractive format, clearly written

Pitt, Valerie, and David Cook. CLOSER LOOK BOOKS. Watts, 1975. each 30 p. each $4.90. elem jhs shs-10

A CLOSER LOOK AT ANTS
A CLOSER LOOK AT GREAT CATS
A CLOSER LOOK AT DESERTS
A CLOSER LOOK AT DOGS

Detailed descriptions of social animals emphasizing physical characteristics, hunting prowess and instincts of great cats, birth process and development of wolves and domestic dogs, community-minded ants, and division of labor among various species; explores physiology of deserts--climate, resources, vegetation, animal life; finely detailed color illustrations depict 12 kinds of snakes, desert plants' water storage systems, underground ant city, tiger's skeletal system, 22 breeds of domestic dogs descended from wolves, etc.; informative material in readable style, interesting format

Wong, Herbert H., and Matthew F. Vessel. SCIENCE SERIES FOR THE YOUNG. Addison, 1976. each 31 p. each $4.13. prim

MY PLANT
MY SNAIL

Very elementary introduction to plants and snails; interest maintained by involving readers in exploring environment to find specific items related to topics; includes comparisons of forms, such as differences and similarities of land and water snails or plants requiring little or much sunlight; open-ended form invites further study and experimentation; illustrated with watercolors

BOOKS (FOR TEACHER USE)

Abruscato, Joe, and Jack Hassard. LOVING AND BEYOND: SCIENCE TEACHING FOR THE HUMANISTIC CLASSROOM. Goodyear, 1976. 171 p. $7.95 paper.

A teaching methods and source book for elementary science; suggestions for planning science curriculum, involving children actively in learning process, accumulating and organizing teaching supplies, and encouraging student initiative; many suggestions for teaching units and topics, student projects,

LOVING AND BEYOND: SCIENCE TEACHING FOR THE HUMANISTIC CLASSROOM. (Cont'd)

investigations, and elementary research; adaptable to science teaching in middle grades through junior high school--more applicable to middle grades

Brown, Barbara B. NEW MIND, NEW BODY. BIO-FEEDBACK: NEW DIRECTIONS FOR THE MIND. Bantam, 1974. 523 p. $2.50 paper.

In-depth treatment of a new phenomenon--biofeedback; written for laymen, the text is authoritative and enjoyable; Brown is herself a strong proponent of this controversial new field, so that her text sometimes assumes a polemical tone; still, her book makes an important contribution to the definition and clarification of this exciting, valid area; describes research under way in psychology and physiology and the biological bases of biofeedback methods of mind control over body systems--skin, muscles, blood pressure, heart; gets into Eastern religions which stress mental discipline; wide-ranging, comprehensive, reliable study

Roellig, Harold F. THE GOD WHO CARES: A CHRISTIAN INTERPRETATION OF TIME, LIFE, AND MAN. Branch Pr., ____. 176 p. $4.50.

Overview of Christian religion from beginning to present written by a geologist-turned-theologian who examines Christian beliefs in light of scientific evidence about earth's origin and man's development; clear, lucid, well documented; invaluable reading for all Christian teachers who must deal with students of the faith coming to grips with science and religion in their lives

Rose, Steven. THE CONSCIOUS BRAIN. New ed. Vintage, 1976. 447 p. $4.95 paper.

Intense coverage of human brain and its interrelated activities, anatomically as well as psychologically and emotionally; specific examination of brain's structure and function; provides information concerning memory, drugs and the brain, madness and mysticism; frequent use of medical terminology; advanced reading level

Books (For Teacher Use) in a Series

Althouse, Rosemary, and Cecil Main. SCIENCE EXPERIENCES FOR YOUNG CHILDREN. Tchrs. Coll., 1975. 10 activities booklets, slipcase $15.

AIR. 32 p.	PETS. 43 p.
AS WE GROW. 38 p.	SEEDS. 36 p.
COLORS. 47 p.	SENSES. 39 p.
FOOD. 35 p.	WATER. 37 p.
MAGNETS. 55 p.	WHEELS. 27 p.

Books for teaching science to preschool child and early childhood classes; organized by concept, problem, materials, and procedure; comprehensive; materials required are easily obtained; provides in-depth study at this early level; adaptable to small-group or individual use; quick and easy reference for teachers of younger students--lots of good ideas

BOOKS (REFERENCE)

THE AMERICAN WILDERNESS. Time-Life. (available from Silver Burdett). 27 titles. each 184 p. each $8.52. jhs shs

THE ANCIENT ADIRONDACKS. 1974	THE HIGH SIERRA. 1972
ATLANTIC BEACHES. 1972	NEW ENGLAND WILDS. 1974

THE AMERICAN WILDERNESS. (Cont'd)

THE BADLANDS. 1974
BAJA CALIFORNIA. 1972
THE BAYOUS. 1973
CACTUS COUNTRY. 1973
CANYONS AND MESAS. 1974
CARIBBEAN ISLES. 1975
THE CASCADES. 1974
CENTRAL AMERICAN JUNGLES. 1975
THE EVERGLADES. 1973
THE GRAND CANYON. 1972
THE GREAT DIVIDE. 1973
HAWAII. 1973
THE NORTH WOODS. 1972
THE NORTHEAST COAST. 1972
THE NORTHWEST COAST. 1973
THE OKEFENOKEE SWAMP. 1973
THE OZARKS. 1974
SAGEBRUSH COUNTRY. 1975
THE SIERRA MADRE. 1975
SNAKE RIVER COUNTRY. 1974
THE SOUTHERN APPALACHIANS. 1975
URBAN WILDS. 1975
WILD ALASKA. 1972

A visually appealing series of books distinguished by superb, colorful photography; the great natural wilderness of America, as well as some parts of Canada and Mexico, are the subjects of informal, first-person essays written by authorities on the regions; flora and fauna, scientific revelations, and historical background are highlights of each area examined in the series; impressive close-ups of rarely photographed birds, insects, and wildlife give a unique dimension to the set; rock formations, foliage patterns, and glacial debris are among the variety of phenomena discussed and photographed, all of which spare the set from joining the trite, prosaic, "calendar pictures" category of aimless sight-seeing through America; articles are long, chatty, personal, and often lyrical; photographs are fully captioned; a table of contents, index, bibliography, acknowledgments, and credits appear in each volume; a fine supplementary reference series. (This item also appears on the Social Studies and Reference Books Advisory Lists.)

Photo Geographic International. PHOTO-ATLAS OF THE UNITED STATES: A COMPLETE PHOTOGRAPHIC ATLAS OF THE U.S.A, USING SATELLITE PHOTOGRAPHY. Ritchie, 1975. 127 p. $9.95. $5.95 paper. elem-6 jhs shs

First publication to offer complete atlas coverage of the country using satellite photography; coverage is arranged in southward moving sequences of photographs that form North-South bands which begin on the West Coast and move sequentially eastward; provides index map for the high altitude satellite photography and color enlargements for 10 major cities; relation of landforms to their use by man becomes strikingly clear as one uses the atlas; unhappily, there are some errors in the geographic labeling of photos--on N. C. map, Asheboro identified as Burlington, Myrtle Beach is placed in North Carolina--but they only slightly detract from an otherwise most useful reference. (This item also appears on the Reference Books Advisory List.)

PREHISTORIC ANIMALS: THE 1976 CHILDCRAFT ANNUAL. Field Ent., 1976. 304 p. $6.95. prim

Easy to read, easy to understand presentation of evolution of prehistoric animals; describes methods used by paleontologists to learn about history of life on earth and progression of animal life from simpler aquatic forms to fishes, amphibians, reptiles, birds, and mammals; compares prehistoric life forms with their modern-day counterparts; illustrated with color pictures, pen-and-ink drawings, photographs; except for presenting the continental drift concept as scientific fact rather than theory, the book is accurate in all important details; scientific language fully explained; phonetic pronunciation guide for scientific names, glossary of new words, bibliography of related literature, and index. (This item also appears on the Reference Books Advisory List.)

SCIENCE YEAR, 1977: THE WORLD BOOK SCIENCE ANNUAL. A REVIEW OF SCIENCE AND TECHNOLOGY DURING THE 1976 SCHOOL YEAR. Field Ent., 1976. 431 p. $7.40. jhs-9 shs

Summarizes significant developments in science during 1976 in sections on technology, people in science, awards and prizes, and outstanding scientists who died immediately preceeding publication; covers such topics as surgery in miniature, paleontology, astrophysics, medicine, geology, chemistry, zoology, and botany; well illustrated with color photographs, drawings, and diagrams. (This item also appears on the Reference Books Advisory List.)

WILD, WILD WORLD OF ANIMALS. Time-Life, 1976. (available from Silver Burdett). each 128 p. each $7.65. jhs shs

THE CATS

Describes evolution and life habits of animals of cat family in sections on hunting, mating, social life of lions, habitat and peculiarities of tigers, range, characteristics, and hunting techniques of leopards, jaguars, pumas, and cheetahs; information on smaller cats, such as ocelot, lynx, bob-cat; numerous photographs and selections on cats written by outstanding authors, including Ernest Hemingway, William Blake, James Fenimore Cooper

DANGEROUS SEA CREATURES

Portrays poisonous and dangerous animals inhabiting the seas; includes articles on sharks, rays, skates, electric eels, dangerous fish such as barracuda and piranhas, sea snakes, and some of the poisonous invertebrates; recounts legends and stories of sea monsters, such as the Loch Ness monster; excerpts from Kon Tiki, Jaws, The Living Sea, The Edge of the Sea, and the Odyssey; color photographs; authentic, fascinating

ELEPHANTS AND OTHER LAND GIANTS

Interesting study of elephants and other large animals in presentation of African and Asian elephants, their family life, social bonds, mating, feeding, grooming habits, and death; includes descriptive material on rhinoceroses, tapirs, giraffes, rheas, ostriches, emus, crocodiles, and giant tortoises; many color photographs and relevant selections by noted authors--Charles Darwin, Rudyard Kipling, George Orwell

MONKEYS AND APES

Describes different species of apes, monkeys, and related primates from South American tropics to Japanese Alps; articles by Alan Moorehead, Gerald Durrell, Edgar Allan Poe, Jane van Lawick-Goodall, and other students of natural history; many color photographs and drawings; maps show natural habitats of species described

REPTILES AND AMPHIBIANS

Surveys natural history of reptiles and amphibians; contains speculative lines of descent from prehistoric life forms to present-day representatives of reptiles and amphibians; describes characteristics and habits of many species of snakes, lizards, crocodiles, turtles, toads, and salamanders;

WILD, WILD WORLD OF ANIMALS: REPTILES AND AMPHIBIANS. (Cont'd)

profusely illustrated with color photographs; includes related articles and stories by Raymond L. Ditmars, Rudyard Kipling, Mark Twain. (This series also appears on the Reference Books Advisory List.)

THE WORLD'S WILD PLACES: THE SAHARA. Time-Life, 1975. 184 p. $8.95. jhs shs

The Sahara is wild and desolate desert, with a story all its own of ancient glaciers and lakes, wind-blown sand, rocky and barren plateaus, and animals and plants struggling for survival; well written; superbly photographed; leaves one with a special reverence for deserts. (This item also appears on the Reference Books and Social Studies Advisory Lists.)

BOOKS (SUPPLEMENTARY TEXTS)

Horowitz, Irving L. CONTEMPORARY EARTH SCIENCE. AMSCO, 1976. 339 p. $2.60 paper. jhs shs

Revision completely overhauling old question and answer format in a brief, concise updating of earth science; basic concepts explained sometimes tersely but always clearly; well illustrated with clear line drawings; what causes weather changes, what happens to water released from atmosphere, how environment affects earth's crust, how sedimentation occurs, and how rocks are formed are some topics in comprehensive study; greatest drawback is tendency to concentrate on information of interest primarily to students and teachers in New York state; otherwise, excellent reference tool for students or teachers

Oxenhorn, Joseph M., and Burton I. Goldfeld. OCEANOGRAPHY AND OUR FUTURE. Learning Trends, 1975. 184 p. guide $2.70 paper. elem jhs

Small paperback textbook well suited for middle school students in mini-course setting; clearly organized units cover basic concepts in oceanography, excluding confusing, unessential details; reviews nearly every sea-related concern--e.g., ocean sediments, forces shaping shores, currents, waves, tides, seawater chemistry, marine ecology, ocean communities, plankton, marine animals, salt marshes, pollution; clear, easily read text; numerous color photographs, artist's sketches, and diagrams ease understanding and sustain interest; greatest drawback is in activities and investigations which are only suggested, not explained--the few projects at the end of the book fail to compensate for this lack

FILMS (16MM)

APHID EATER: EVE'S RESEARCH PROJECT. 16mm. 15 min. sd. guide color $220. Barr, 1976. jhs shs-10

Eve's discovery of tiny eggs on a yard plant becomes an intriguing project; scientific processes shown--observation, classifying, measuring, talking to peers, doing library research, keeping notes on observations; excellent film showing coordination of library and laboratory skills

ARMAUER HANSEN: DISCOVERER OF THE LEPROSY BACILLUS. 16mm. 10 min. sd. guide color $145. BFA, 1976. jhs shs-10

Young doctor's determination to find cause of leprosy dramatizes principles of scientific investigation--careful observation, questioning, recording, experimentation; protrays Hansen's self-discipline, perseverance through frustration and joy, trial and error; celebrates his eventual discovery of leprosy bacillus, partially eliminating the disease

BALANCE IN NATURE: A FIRST FILM. 16mm. 9 min. sd. guide color $120. BFA, 1975. prim elem

An ecological 'first film' for early grades which takes an in-depth look at importance of balance in nature, stressing interactions of living things with minerals, water, air, and other natural resources; demonstrates interdependence of life forms through example of foxes and mice; employs colorful slides; suggests follow-up questions for class study and discussion; useful introduction to basic principles of ecology. (This item also appears on the Kindergarten-Early Childhood Education Advisory List.)

CHEMISTRY IN NATURE. 16mm. 16 min. sd. guide color $235. Centron, 1974. shs

Demonstrates chemical changes occurring in nature; a lake formed in a dormant volcanic crater just north of Tokyo was discovered in 1952 to have highest acidity of any lake in the world; students test the lake water with litmus paper, finding that the paper turns red as when dipped in sulphuric, hydrochloric, and citric acids; various laboratory experiments performed to illustrate what causes high acidity; chemical formulas for substances and equations for chemical reactions given; demonstrates reactions of chemical compounds--e.g., hydrogen sulfide turns copper black, barium chloride reacts with sulphuric acid to form insoluable barium sulphate; experiments can be replicated easily in school laboratory; explicit, informative, easy to understand; good for all chemistry and some general science classes; pauses indicated to suggest appropriate places for discussion and/or experimentation

COMMUNITIES OF LIVING THINGS. 16mm. 15 min. sd. guide color $210. Barr, 1974. elem jhs shs

Authentic portrayal of the six communities of living things in North America: tropical forest, deciduous forest, desert, grassland, coniferous forest, and tundra, merging one into the other, constantly changing; depicts interaction between plants and animals, showing their special adaptations for survival; points out physical factors such as geography, climate, and altitude affecting these living things; well done

AN ECOSYSTEM: A STRUGGLE FOR SURVIVAL. 16mm. 22 min. sd. guide color $310. Natl. Geog., 1975. jhs shs

Vivid presentation of an ecosystem in India that is deteriorating rapidly because of mismanagement, drought conditions, and other problems; problem is presented but not solved; depicts overgrazing by water buffalo, removal of soil by natives in selling manure, reliance of lions on domestic prey, and overpopulation of system by all animals; excellent film to stimulate thinking and promote some value clarification; activities suggested

ELECTRICITY: HANDLE WITH CARE. 16mm. 16 min. sd. guide color $220. Handel, 1974. elem jhs shs

Seeks to prevent accidents caused by misuse of electricity in homes and offices; gives history and definition of electricity and explains operation--current resistance and voltage; emphasizes importance of proper wiring and reviews reasons for not overloading circuit; fuses, grounding, extension, and repairing thoroughly discussed; practical information, clearly presented

ELEMENTARY NATURAL SCIENCE: SONGBIRDS. 16mm. 13 min. sd. guide color $195. Centron, 1974. elem

Discusses characteristics of songbirds--robins, wrens, chickadees, blue jays, yellow warblers, bluebirds, cardinals, and goldfinches; pictures birds in natural habitats, emphasizing feathers, feet, nesting, feeding (wrens may feed their young as many as 1,000 times a day), and coloring; shows kinds of birdhouses used by various birds; flashes difficult words on screen--e.g., "passeriformes," "albinism," "preening," and "fecal sacs"; good, clear narration and photography; useful for identifying birds and introducing or culminating a bird unit in general science classes

ENERGY MANAGEMENT. 16mm. 15 min. sd. color $275. Klein, 1975. jhs shs

Tips for consumers on the wise use and conservation of energy in the home, the office, and in transportation; emphasizes cheap timing devices easily set up on appliances to get the most use with the least energy waste; excellent guidelines to personal handling of energy; a teacher's guide would strengthen use of presentation

FUSION: THE ULTIMATE FIRE. 16mm. 14 min. sd. guide color $195. BFA, 1976. jhs-9 shs

Describes fusion energy as one alternative for fulfilling our energy requirements; various laboratory experiments shown in detail; depicts use of laser pulse in small pellets to create necessary temperature for reaction to take place; discusses process of fusing hydrogen atoms to form helium atoms aimed toward ultimately producing tremendous release of energy similar to energy produced by sun; good summary discussion for large groups

THE GREAT DINOSAUR DISCOVERY. 16mm. 25 min. sd. color $325. B.Y.U. Pr., 1976. jhs shs

Viewer experiences thrill of discovery and sense of awe as Dr. David Jemson, well-known paleontologist, and his assistants uncover new species of carnovoirs in a dusty Colorado mesa; excitement mounts when largest herbivoir ever found is discovered and excavated before the camera's eye; filmed as events occur, with short, clear explanations of excavation, preservation, and removal of large fossils interspersed; explains reconstruction of fossil in clear, understandable terms despite enormous anatomical problems discussed; excellent filming and clear, crisp, understandable audio; valuable addition to earth science media, offering opportunity to share rare aspect of paleontologist's work and even rarer excitement of discovery in an outstanding documentary

GYSPY MOTHS: VANDALS OF THE FOREST. 16mm. 10 min. sd. guide color $145. Learning Corp., 1975. elem-6 jhs shs-10

Explores life cycle of gypsy moths, emphasizing larva stage as period of ravenous leaf eating--one 2-inch caterpillar capable of devouring one square foot of leaf surface a day; reviews history of gypsy moths' import from France, failure of experiment to crossbreed them with silkworms, their escape to Northeastern forests; dramatizes their potential to alter forests totally and resulting economic implications for all of us; examines means of reproduction and present-day control methods; a chilling look at a tiny life form's potential for unbalancing our ecosystem

HOW MANY STARS. 16mm. 11 min. sd. guide color $150. Moody, 1974. elem-6 jhs shs

Awe-inspiring presentation directed toward conceptualizing the enormity of our solar system, our galaxy, and untold number of stars, other galaxies; traces humanity's steps in attempting to determine number of stars from Galileo's first telescope to today's 100-inch telescope at Mt. Wilson Observatory, to radioscopes used to detect celestial bodies invisible through most powerful optical devices invented; explains such terms as "solar system" "galaxy," "nebulae"; animation demonstrates how many earths could fit into our sun and how long it would take to travel to nearest star at speed of light; although limited motion photography is employed, the film is highly effective; references to God--e.g., "...handiwork of God," "...only God knows the answer," and "...the infinite power that put them [stars] there"; useful in science classes

MAN: THE INCREDIBLE MACHINE. 16mm. 28 min. sd. guide color $310. Natl. Geog., 1975. shs

Detailed study of structure of the human body, explaining many of its parts; X-ray, slow motion, and microcinematography clarify functions of skeleton, muscular system, digestive processes, circulation of blood, voice, ears, skin, and eyes; cinemicrography graphically portrays the blood working to form a first line of defense against disease; most incredible part of human machine is the brain which serves as the center for all actions of the body; for advanced studies in biology, human anatomy, and physiology--an outstanding, truly mind-boggling visual experience which many may recall from its television presentation. Here's the human body, literally turned inside out. Fascinating.

MARINE BIOLOGY: LIFE IN THE TROPICAL SEA. 16mm. 11 min. sd. guide color $160. BFA, 1975. jhs shs

Colorful, authentic portrayal of diverse animals found among coral reefs in tropical seas; records body functions and habits of many types, including sponges, crustaceans, corals, sea squirts, shrimps, crabs; traces process of evolution and emphasizes remarkable interdependence, each creature vulnerable to whatever disturbs the other; gives questions for discussion; excellent for introducing lesson or unit

THE MEADOW: AN ECOSYSTEM. 16mm. 13 min. sd. guide color $195. Barr, 1976. jhs shs

Effective presentation of how nature balances life in a meadow; pictorially follows meadow life from winter to winter, illustrating natural way plants

THE MEADOW: AN ECOSYSTEM. (Cont'd)

use solar energy to produce glucose, animals eat plants to survive, predators and prey balance each other, flowers provide nectar to reward insects for pollination, a controlled number of seeds germinate, etc.; points out interdependence of living things as a system sensitive to each other and surroundings; beautiful photography; enrichment for all science classes

MY WORLD--EARTH. 16mm. 11 min. sd. guide color $155. Churchill, 1974. prim-3 elem jhs-7

Child's view of the earth, its rocks, minerals, and soil; shows importance of soil to plant growth and other life and points out interrelationships in nature among plants, animals; vocabulary is upper elementary and junior high level, but many younger children are pictured; younger children question older ones about various terms, indicating how they learn from each other; employs sophisticated photographic techniques; multiracial representation in pictures; useful primarily as introduction to unit or for discussion purposes; less well done than its companion film, MY WORLD--WATER; for the comprehensive film collection

MY WORLD--WATER. 16mm. 11 min. sd. guide color $155. Churchill, 1975. prim elem

Presents child's concept of water cycle, uses of water, and need for water conservation; exceptionally good photography pictures water in its various forms--solids, vapor, liquid--and shows its many uses--e.g., for drinking, bathing, washing pets and automobiles; as the camera scans a water purification plant, a child describes the purification system; ways in which people waste water shown as children express concern about conservation; film ends with dripping faucet as camera catches and stops motion on the last single drop, emphasizing the point that, indeed, our water supply could run out; effectively employs various photographic techniques to enhance presentation; a beautiful production to instill appreciation for this precious natural resource; raises many questions about water which teacher may use as departure points for class discussion, student projects; a companion to the film, MY WORLD--EARTH

THE NEW ALCHEMISTS. 16mm. 29 min. sd. color $395. Benchmark, 1975. jhs shs

Demonstrates how experimental models can be used to study nature and apply findings to benefit mankind; illustrates application of simple principles of physics and biology in developing a self-contained ecosystem which provides abundant food supply without polluting or upsetting balance of nature; colorful, excellent film

OCEANOGRAPHY: THE ROLE OF PEOPLE IN OCEAN STUDIES. 16mm. 19 min. sd. guide color $265. BFA, 1976. elem jhs shs

Stresses indispensable role people play in studying the ocean; using simple equipment, such as snorkle, metric square, bags of red dye, a research team collects essential data in ways only humans can accomplish; activities include mapping rate and direction of the current and identifying various organisms; skillfully filmed

A PARK COMMUNITY. 16mm. 10 min. sd, guide color $145. Barr, 1975.
elem jhs shs-10

Skillful presentation about the park and our management of an ecosystem; offers examples of food chain, beginning with plants (producers), proceeding to animals (various levels of consumers), earthworms (decomposers), and showing interaction of these plants and animals; ideal for introductory or summary purposes; discussion questions and activities suggested

PLANT LIFE AT WORK. Rev. ed. 16mm. 11 min. sd. guide color $145. Moody, 1976.
jhs shs

Superb use of time-lapse photography reveals response of plant life (mainly flowering plants) to light and gravity; growth patterns and development of plant from bud shown; emphasizes special purpose and design for each development; will awaken appreciation for complex patterns of life

POND-LIFE FOOD WEB. 16mm. 10 min. sd. guide color $140. Natl. Geog., 1976.
elem jhs shs-10

Explores intricate interaction of all levels of organisms in a pond--producer (green plants), herbivorous (plant eaters), carnivorous (flesh eaters) and the decomposer; shows flow of energy by following food chain: plants eaten by small animal which, in turn, feeds larger animal, on through hierarchy; explains web concept as involving several chains within pond; interesting, colorful introduction

RAPTORS: BIRDS OF PREY. 16mm, 14 min. sd, guide color $190. BFA, 1976.
elem jhs shs-10

Close-up of such birds as golden eagle, sparrow hawk, great horned owl, falcon, red tail hawk, etc., their habitats, feeding habits, flying patterns, unique body structures such as those of hooked bill and talon which allow them to fill a special niche in the ecosystem; shows daytime and night hunting species; good introduction to predator component of the natural community

THE RIGHT WHALE: AN ENDANGERED SPECIES. 16mm. 23 min. sd. guide color $310.
Natl. Geog., 1975. jhs-9 shs

In-depth study of the right whale in its natural range off coast of Patagonia; film describes how the whale lives: feeding mechanism, courtship, mating, rearing of young, play, and communication with other whales; includes incredible recordings of sounds made by whales when snoring, flippering (slapping the water with their fins), lobtailing (slapping the water with their flukes), and breaching (thrusting the forward end of their bodies high out of the water); stop-motion, slow motion, and underwater photography illustrate anatomy and movements of this endangered species; for the already comprehensive film collection or for instructional programs offering studies in marine sciences; large 24" x 30" poster/guide accompanies film

SCIENCE--NEW FRONTIERS: IS THE WEATHER CHANGING? 16mm. 16 min. sd. guide
color $225. BFA, 1975. jhs shs

Examines variations in weather patterns as indicators of world climate change; droughts in usually wet areas, winds and floods in temperate areas, raise questions about shortages in food, energy; interviews with scientists recorded; discussion questions suggested

STORM TIDE...THE ISLANDERS AND THE ELEMENTS. 16mm. 28 min. sd. color $300. NCSU-Agri., 1975. elem jhs shs

Picturesque survey of North Carolina Outer Banks emphasizing conservation problems and efforts; traces history of Banks, focusing on fishing, tourism, and Coast Guard; interesting interviews with natives and spokesmen for Sierra Club, National Park Service, N. C. State University; good aerial photography, especially of Labrador current and Gulf Stream clashing on outer shoals to create "Graveyard of the Atlantic"; excellent introductory material highlighted by "working-with-nature" movement now under way on Outer Banks aimed at buttressing the area through cooperation with natural flow of wind and tide

STRANGE AND UNUSUAL ANIMALS. 16mm. 10 min. sd. color $170. AIMS, 1974. elem jhs shs-10

Focuses on adaptation in animals such as sloth, anteater, ostrich, duckbill platypus, koala bear; shows each in its natural habitat exercising its peculiar adaptability--camouflage, a long sweet, sticky tongue, fish that carry water so that they can breathe out of water; asks open-ended questions; for introductory or summary purposes

USE YOUR EARS. 16mm. 9 min. sd. guide color $140. Barr, 1974. prim elem

Emphasizes sense of hearing, its importance; uses various techniques to stress points--such as eliminating soundtrack from a scene; depicts various types of listening--e.g., for fun, for learning, for observing; stresses safety sounds; mentions noise pollution; suggests questions and activities

WATER: THE COMMON NECESSITY. 16mm. 9 min. sd. guide color $135. Moody, 1975. elem jhs

Emphasizes necessity of water to all life in graphic depiction of water cycle and its importance in replenishing our fresh water supply; split-screen technique demonstrates amount of water needed in agricultural and industrial production--e.g., for making a loaf of bread, cooking a steak; discusses sociological, geographical, scientific, and environmental aspects of water; employs sophisticated production techniques, such as time-lapse photography and microphotography; effective animation used; open-ended, allowing viewers to evaluate effects of pollution on water supply; good multiracial representation; excellent film for general use in study of water; good for general, physical, and earth science classes and studies in ecology and conservation; exquisite color photography

WATER: WHY IT IS WHAT IT IS. 16mm. 11 min. sd. guide color $160. Moody, 1975. jhs shs

Uses the molecular structure of water to provide basis for understanding its properties; discusses characteristics of water as a solvent; animation demonstrates structure of water molecule and its property of surface tension; photographically shows that water has a film, or "skin," capable of supporting certain objects; illustrates water's action in capillarity, erosion, and freezing; exceptionally good color photography; useful in all science classes

WONDER OF OUR BODY. 16mm. 12 min. sd. guide color $165. Moody, 1976. jhs-9 shs

Portrays marvels of the human body, comparing its systems and functions and finding them superior to finest man-made machines; structure and functions of the eye, ear, hands, heart, system for maintaining relatively constant body temperature, the self-lubricating skeletal parts of bone and cartilage--all are just some of the physical miracles examined; for introduction, instruction, summary

WORLD OF LITTLE THINGS. Rev. ed. 16mm. 14 min. sd. guide color $190. Moody, 1976. jhs-9 shs

Presents life in the microscopic world, beginning with life in a drop of water and progressing to oceans; points out water's function and value to man; examines such organisms as the amoeba, paramecium, diatom, flatworm, and many others; narration tends to assert that there is a special design accounting for presence of such organisms, suggesting God; thought-provoking look at microscopic organisms--in one thimbleful of diatomaceous earth exist more than 14 million diatoms, each once a living thing. Absorbing material.

Films (16mm) in a Series

ANIMAL BEHAVIOR SERIES. 3 reels 16mm. sd. guides color each $180. Natl. Geog., 1975. shs

INVERTEBRATES: CONDITIONING OR LEARNING? 15 min.

Indicates that even spineless animals are capable of learning: paramecia, associating annoying heat with light, seek darkness, planarian worms conquer a maze; convincing, interesting experiments will intrigue viewers; ideal for introduction or summary for large or small group

DO ANIMALS REASON? 14 min.

Illustrates that at least some animals, in addition to having innate knowledge and behaving instinctively, apparently have the ability to store up past experiences and use them in solving problems; filmed experiments show a triggerfish removing stones to reach and eat a sea urchin, a starling learning to trigger a food dispenser then rejecting worms filled with bitter liquid, dolphins apparently communicating by transmitting abstract ideas, and a chimp learning to stack boxes to reach a banana, all indicating that the study of animal behavior reveals much but leaves much to be learned and understood; for the sophisticated, comprehensive program

THE FUNCTION OF BEAUTY IN NATURE. 14 min.

Demonstrates that beauty observed in nature's creatures may also be functional and serve to interpret behavior; experiments reveal that animals have an innate knowledge causing them to behave instinctively; under controlled conditions, a spider raised in isolation seems programmed to spin its intricate web and capture its prey; two male fish instinctively battle over breeding grounds and change colors to indicate triumph and defeat, and a male bird's beautiful song is used to threaten another male encroaching upon his territory; indicates that

ANIMAL BEHAVIOR SERIES: THE FUNCTION OF BEAUTY IN NATURE. (Cont'd)

man is guided by reason but shares basic instinctive patterns with other animals; guide for all films in series and two wall charts illustrating development of animal-behavior theories accompany print; for the collection serving comprehensive instructional programs; packaged in a book-like, attractive container

BIO-SCIENCE SERIES. 2 reels 16mm, sd, guides color. Natl. Geog., 1976. elem jhs shs-10

LIFE CYCLE OF THE HONEYBEE. 12 min. $175

Detailed, picturesque presentation of life cycle of the honeybee, describing members of each social division (workers, drone, queen), their body structure and responsibilities, showing all bees highly geared to maintenance of the hive through such activities as grooming the queen, maintaining minimum temperature, and fighting off intruders; demonstrates process of finding and gathering nectar; beautiful, close-up color shots

LIFE CYCLE OF THE SILK MOTH. 11 min. $160

Colorful, informative presentation of life cycle of the silkworm, beginning with mating and laying eggs; larva stage shows eating habits and the spinning of silk to form a cocoon; time-lapse photography details transformation to maturity; mentions their commercial value; good film for in-depth presentation of an interesting insect

FILMSTRIPS (SOUND)

Filmstrips (Sound) in a Series

ANIMAL BEHAVIOR. 5 color filmstrips, 5 cassette tapes, guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1975. elem jhs shs-10

ROOM TO LIVE	DEFENSE
CONTINUING THE SPECIES	OBTAINING FOOD
MIGRATION	

Information on how animals employ specially adapted body structure and behavioral patterns to establish territorial boundaries, obtain food, determine migration habits, defend themselves, and care for their young; covers peculiar self-preserving behavior of antelope, lions, birds, wild dogs; assesses relationship between predator and prey and examines mating and courtship of several species; excellent presentation of how different animals' behavior secures their survival; closely tied with ecological concepts

ANIMALS AND HOW THEY GROW. 5 color filmstrips, 5 cassette tapes, guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1976. prim elem

MAMMALS	AMPHIBIANS AND REPTILES
FISH	INSECTS
BIRDS	

Colorful, informative series on how major groups of animals grow, their specific characteristics and rate of growth, supplemented with information on parental care and protection; kinds of animals depicted include

ANIMALS AND HOW THEY GROW. (Cont'd)

elephants, robins, snow geese, salmon, salamanders, and insects, such as the common housefly; outstanding photography and well-paced narration; most useful with beginning science students in primary-elementary range to teach basics of careful observation, comparison, and gathering of information; individual teacher's guide for each filmstrip contains objectives, complete script, key points, and vocabulary; filmstrip cans, tapes, and manuals color-coded for ready reference; excellent large- or small-group introduction to developing scientific skills of observation

BEAR COUNTRY AND BEAVER VALLEY. 4 color filmstrips, 4 cassette tapes, guides $71. Disney, 1975. prim elem

BEAR COUNTRY, PART 1
BEAR COUNTRY, PART 2
BEAVER VALLEY, PART 1
BEAVER VALLEY, PART 2

In true Disney style, set explores habitats and habits of the bear and beaver; through eyes of two bear cubs, viewer gets concept of bears' life--playfulness, food, enemies, etc.; information on beavers, "nature's architects," presented in biographical account of two-year-old beaver who leaves his family and strikes out on his own to explore new territory and construct a home; includes information about other animals in bear and beaver country; single-sheet guides give background information, story content, suggested student activities, and bibliography of related material; if your cabinets house standard filmstrip cans, these won't fit--they are 2" in diameter

ENERGY. 3 color filmstrips, 3 cassette tapes, 1 poster 18" x 20," guide $65. Hawkhill, 1976. shs

ETERNAL DELIGHT
THE WORLD GAME
GOOD MORNING, BROTHER SUN

Series exploring the nature, uses, sources, and transformation of energy employing a philosophical approach to explain scientific and poetic view of energy, laws of thermodynamics, creation of beauty, and the orderliness of the human mind in perceiving and harnessing energy in all its forms; recalls historical development of processes and machines to convert energy into industrial uses; alludes to social orders based upon energy and its uses in industry; surveys the potential of new techniques to capture solar energy with its promise of better standards of living; provocative narration combined with photographic reproductions opens up avenues of thought concerning energy in relation to society and social progress; each segment of three-part series is independent and capable of use without reference to other titles; adaptable to advanced studies in science and sociology at senior high school level; useful as a review, as a conclusion to a unit, or as enrichment; unusual, beautiful--transcends the purely scientific or purely historical; preview before purchase. (This item also appears on the Social Studies Advisory List.)

ENERGY AND THE ENVIRONMENT. 2 color filmstrips, 2 cassette tapes, guides $39. Bosustow, 1974. jhs-9 shs

THIS PRECIOUS EARTH
DOING THE ECO-ETHIC

Shows how our industrial development, affluent life-style, unrestricted use of diminishing raw materials, and total disregard for environmental conditions are resulting in our having to pay the piper; discusses means

ENERGY AND THE ENVIRONMENT. (Cont'd)

for rectifying our mistakes, various forms of conservation being the key; recommends recycling and sound energy management; challenges viewer to assume responsibility for setting things right again; colorful photographs and cartoon-like drawings; guides contain complete script and suggestions for discussion; packaged in vinyl, book-like container

FIRST IDEAS ABOUT ENERGY. 4 color filmstrips, 4 cassette tapes, guide $68. with disc recordings $56. BFA, 1975. elem

WHAT MAKES THINGS MOVE?	WHERE DO WE GET ENERGY?
WHAT ARE THE DIFFERENT KINDS OF ENERGY?	HOW DO WE USE ENERGY?

Lucid, well-illustrated explanation of energy supported by examples of different energy types, their sources, and vivid examples of their use; defines energy, both human and mechanical, as a vital, many-faceted component of our lives--needed just to move a hand, operate a machine--and looks at stored energy in oil, wood, plant life, and wind that awaits release and harnessing; sunlight, electricity, sound, wind, natural gas, moving water examined; history of energy reviewed, including use of atomic energy; conservation stressed in tips and cautions; comprehensive coverage for middle grades; does indicate a lack of faith in solar energy; teacher's guide lists each filmstrip's ideas and suggests follow-up activities

FIRST IDEAS ABOUT PLANTS. 6 color filmstrips, 6 cassette tapes, 48 activity cards, guide $110. with disc recordings $92. BFA, 1975. prim elem

PLANT DIVERSITY	PLANT ADAPTATIONS
PLANT INTERACTION	PLANT CYCLES AND CHANGE
PLANTS AND ENERGY	PLANT COMMUNITIES

In-depth view of plants easily grasped by elementary pupils; many concepts introduced--wide variety of plant life, interdependence of living things, need for energy in highly organized plant state, constant changes and adaptations of plant life to meet changing environmental conditions, and intricate, involved plant ecosystems; excellent examples, beautiful photography; lucid, clear presentation; teacher's handbook gives synopsis of each filmstrip; activity cards extend filmstrip lessons in practical follow-up experiments and studies for teacher-student consideration

FOUR BIOMES. 4 color filmstrips, 4 cassette tapes, guide $68. with disc recordings $56. BFA, 1976. jhs shs

THE TEMPERATE FOREST BIOME	THE GRASSLAND BIOME
THE RAIN FOREST BIOME	THE DESERT BIOME

Describes natural conditions existing in four biomes: temperate forest, rain forest, grassland, and desert; in each case, amount of rainfall has determined development of four distinct environments; temperate forest and rain forest examined in first two filmstrips, grassland and desert biomes which developed under conditions imposed by restricted rainfall examined in last two filmstrips; emphasizes interdependence of plants and animals, their effects on earth's environment, and ecological relationships and changes in balance of nature created by man; encourages conservation of natural systems and ecological relationships; beautiful color pictures; teacher-planned discussion and activities necessary before and after viewing for maximum effectiveness in science and biology classes and studies in conservation

THE GALAPAGOS--EVOLUTION'S LABORATORY. 4 color filmstrips, two 12" disc recordings 33 1/3 rpm, guide $57. with 4 cassette tapes $62. Coronet, 1976. (available from Keller Assocs.). jhs shs-10

STRANGE LANDS, STRANGE LIFE
DARWIN'S OBSERVATIONS
DARWIN'S THEORIES
RESEARCH SINCE DARWIN

Introduces students to strange animals who inhabit Galápagos Islands, illustrates observations made by Charles Darwin when he first visited islands, ties his observations to his conclusions, and describes scientific research presently being conducted on Galápagos as well as efforts to preserve islands as a "natural habitat"; excellent photography and narration provide comprehensive view and impression of the archipelago; teachers planning units on evolution, adaptation, or relation of life to earth's geologic history will find the series exceedingly useful; filmstrips adapt well to life science, biology, and certain topics in earth sciences; however, both individual filmstrips and series as a whole require pre- and post-activities planned by the teacher

LET'S HAVE A GARDEN. 3 color filmstrips, 3 cassette tapes $39.95. Rodale, 1974. elem jhs-7

PLANNING, PREPARING, PLANTING
MULCHING, MAINTENANCE, MAKING THINGS GROW
PICKING, PEELING, PRESERVING

Step-by-step presentation on growing a vegetable garden from initial planning and preparation to final picking, peeling, preserving; specific information on each step: how to start plants indoors in paper cups, milk cartons, etc., how to transfer them safely outside, how to weed, prepare compost, and control pests without poisons, how to mulch, when to harvest each vegetable, how to freeze, dry, or store vegetables, and how to prepare garden for return of winter; directions well illustrated with colorful, well-composed photographs; conservation and basic ecology included; no fertilizer or chemical pesticides used; mulching and use of compost always recommended and carefully illustrated; urges control of harmful insects through use of their natural enemies and proper distribution of plants; excellent content; a teacher's guide would be helpful; multiracial representation among children in photographs; child's voice alternates with adult's in narration; clear, no-nonsense, well-paced instructions

THE LIFE OF ANIMALS. 5 color filmstrips, 5 cassette tapes, guides $67.50. with disc recordings $67.50. Natl. Geog., 1976. prim elem

WAYS ANIMALS GET FOOD
ANIMAL HOMES
WAYS ANIMALS MOVE ABOUT
WAYS ANIMALS PROTECT THEMSELVES
ANIMALS AND THEIR FAMILIES

Unique approach to animal life which contrasts animal babies with families to those without families; vivid close-up shows king snake leaving babies to hatch and survive as best they can, whereas baboon troop, seal herd, and ant colony depict family life at its best; excellent voice quality in narration, which is well paced for primary children; close-up shots well composed--excellent sequence shows green frog catching a fly with his long, sticky tongue, another depicts a bittern blending into grass around him for camouflage; material packaged in heavy-duty box and all items color-coded for hasty selection by busy classroom teacher; excellent teaching tools to arouse young students' curiosity in animal behavior--food, homes, locomotion, defense, family life; first-quality photography; guide offers pertinent information for chart-making, riddles, or "tell a picture" experiences (Wilkes County)

NATURAL RESOURCES, OUR CHANGING ENVIRONMENT. 6 color filmstrips, 3 cassette tapes, guide $66. Troll, 1975. elem-6 jhs shs

WHAT ARE NATURAL RESOURCES?	POLLUTION OF NATURAL RESOURCES
WHO NEEDS NATURAL RESOURCES?	THE EFFECTS OF POLLUTION
USING UP NATURAL RESOURCES	CONSERVING OUR NATURAL RESOURCES

Attractive, clearly presented series devoted to importance of our natural resources; three basic types--vegetable, animal, and mineral--and their interactions depicted; renewal and nonrenewal discussed; pollution, wasted energy thoroughly explained (excessive heating and cooling of buildings, unnecessary lights, overuse of automobiles); conservation habits highly emphasized in detailed information on recycling; graphic depiction and discussion of huge demands we have made on earth's supplies, meanwhile covering the land with asphalt and concrete, contaminating water with pesticides and wastes, spewing gases and soot into air--a shocker, but not a fatalistic or sensational production; a detailed, coming-to-grips-with issues presentation; excellent follow-up activities suggested in teacher's guide drive home the points

OBSERVING LIVING THINGS. 6 color filmstrips, three 12" disc recordings 33 1/3 rpm, guide $71. with 6 cassette tapes $79. Coronet, 1975. (available from Keller Assocs.). prim elem

ON A BEACH	IN A MEADOW
IN A WOODLAND	IN A DESERT
IN A MARSH	IN A POND

Various environments presented in very personal adventures of different children who visit unique ecological settings accompanied by helpful adults; observations depicted through eyes of youth as they visit each environment; vivid contrasts in environments--Florida beach, Western desert, Kansas meadow; excellent close-up photography; animal camouflage, feeding habits, body structure, habitats, etc., observed firsthand as children study pond life, bees, Canada geese, egrets, gray squirrels and other creatures going about their daily routine; plant life also examined--green moss growing on fallen tree trunk, thistles and milkweed flowers dispersing their seeds, saguaro cacti extending their long, arm-like branches swollen with water; too bad only one girl depicted in the adventuresome group of children--all the adults are men too (Uncle Charles, Uncle George, Uncle Lupe, Grandfather, etc.); aside from air of male camaraderie prevalent in series, information itself is excellent, showing diversity of our country as well as that of nature per se; useful with small or large groups for in-depth study; objectives and further study suggestions in teacher's guide

PLACES WHERE PLANTS AND ANIMALS LIVE. 5 color filmstrips, 5 cassette tapes, guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1975. prim elem

THE WOODS	THE SEASHORE
THE MEADOW	THE CITY PARK
THE STREAM	

More environmental study emphasizing varied ecosystems and interrelationships; series differs from some in its inclusion of inner-city community found in parks where plants, animals, and people interact; each short strip acquaints primary/lower elementary grades with the busy life forms functioning in woods, meadows, streams, on beaches, and in parks; brings attention to readily recognizable animals and plants--frogs, squirrels, turtles, goldfish, tulips,

PLACES WHERE PLANTS AND ANIMALS LIVE. (Cont'd)

sea oats--awakening young viewers to often overlooked or rarely observable traits and behavior; excellent for teaching skills of comparing and contrasting; all cassettes and guides color coded for ready reference; excellent teacher's guide for each title in series; fine tool for group instruction in introductory lesson

PROTECTIVE ADAPTATIONS IN ANIMALS. 4 color filmstrips, two 12" disc recordings 33 1/3 rpm, guide $55. with 4 cassette tapes $60. Coronet, 1976. (available from Keller Assocs.). jhs shs-10

COLORS THAT CAMOUFLAGE
PATTERNS AND SHAPES THAT CAMOUFLAGE
WARNING COLORS AND MIMICRY
CAMOUFLAGE AND BEHAVIOR

A study of the broad scope of protective adaptations in animals; defense devices of color camouflage, protective patterns and shapes, warnings and mimicry to confuse other animals, and the combination of camouflage techniques and distracting behavior all examined and illustrated--such as bluffs like the hog-nosed snake's (he spreads his hood to reveal his warning colors, hisses and opens his mouth to display bright pink interior, finally rolls over and plays dead if attacker persists!); excellent photography and narration; circles, arrows, etc., drawn on photos aid viewers in distinguishing camouflaged animals; units cover nearly all animal groups of interest to life science and biology classes; as with all such units, these should not be used without adequate preparation and follow-up activities

THE RESTLESS SEA. 5 color filmstrips, 5 cassette tapes, guide $88. Disney, 1975. jhs shs

OCEANOGRAPHY--AN OVERVIEW
TIDES, WIND AND WAVES
MR. C. WATERS
SURFACE AND DEEP OCEAN CURRENTS
LIFE IN THE SEA--AN UNFOLDING STORY

Presents important, complex aspects of oceanography, recounting scientific studies from initial effort by H.M.S. CHALLENGER in 1872 to the present; illustrates actions of tides and surface and deep currents, explaining how moon and sun control and affect these; discusses plant and animal life in the ocean, drawing a parallel between percentage of water on earth and percentage of water in animals' bodies; cartoon figure of drop of water explains in song the chemical makeup of water and illustrates its three forms--liquid, solid, vapor; emphasizes importance of water as life-sustaining agent which may well hold the secret to man's survival; would have been much more effective had photographs been used where possible; artwork could be better; excellent teacher's guide offers pre-test, vocabulary study, synopsis of each strip, topics for research, and bibliographies of related materials

SEASONAL ADVENTURES: THE WORLD OF PLANTS AND ANIMALS. 6 color filmstrips, 6 cassette tapes, guide $90. SVE, 1976. prim elem

SEASONAL MYSTERIES: BEING A NATURE DETECTIVE
ANIMALS IN THE FALL: WINTER PREPARATION
PLANTS IN THE FALL: WINTER PREPARATION
ANIMALS IN THE SPRING: NEW LIFE
PLANTS IN THE SPRING: NEW LIFE
FROM SPRING TO SPRING: PLANT SURVIVAL

Promotes awareness of nature's mysteries and encourages exploration through all the senses; explains and illustrates how animals and plants undergo

SEASONAL ADVENTURES: THE WORLD OF PLANTS AND ANIMALS. (Cont'd)

seasonal changes--e.g., hibernation, reproduction; guide contains complete script; good for primary and elementary science classes; will stimulate interest in field trips and nature walks

THE SEASONS. 5 color filmstrips, 5 cassette tapes, guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1975. prim elem

THE CHANGING SEASONS	AUTUMN
SPRING	WINTER
SUMMER	

Picturesque portrayal of seasons of the year and changes effected by the advent of each season; seasonal effects on animal and plant growth and habits vividly shown; seasonal activities of boys and girls also depicted; introductory strip entitled THE CHANGING SEASONS reviews all four seasons briefly, generalizing about each one's special influence on earth and animals; in four following strips, each season is examined in more detail--how daylight wanes earlier in autumn, leaves turn, animals store up food, hibernate, grow thick coats of fur, etc.; insect life, plant life, the sky, changing coloration--all vividly illustrated in photographs showing seasonal effects; happy-time activities (carving jack-o'-lantern, building snowman, summer fishing) liven up lovely nature scenes; emphasizes phenomena that pupils can readily observe; quite useful for small and large groups during introductory lesson; teacher's guides with objectives, vocabulary, and suggested activities; all contents color coded; flavorful, appealing series

SILENT WAR IN THE SEA. 4 color filmstrips, 4 cassette tapes, guide $68. with disc recordings $56. BFA, 1976. jhs shs

POISON, POINTS AND PIGMENTS	COMPETITION FOR SPACE
PROTECTION OF YOUNG	SUITS OF ARMOR AND STRATEGY

Entire group of concepts revolving around adaptations of organisms to survive and compete for space illustrated and discussed in sound filmstrips devoted to offensive and defensive mechanisms, protection of offspring, territorial competition, and behavior; each filmstrip treats a complete group of concepts and each leads sequentially into the next; clear narration; terminology well explained in context; pictures photographed primarily underwater are superbly adapted to subject matter; only hazard in this package is if presented without preparation or follow-up activities, it might offer too many ideas rapidly; superb teaching aids, however, for the teacher who plans a unit with this series in mind

SOUND. 4 color filmstrips, 4 cassette tapes, guide $68. with disc recordings $56. BFA, 1976. elem jhs

WHAT IS SOUND?	EARS AND HEARING
SOUND WAVES	USES OF SOUND

Comprehensive study of sound--making of sound, sound waves, how we hear, and the use of sound; looks at sounds that warn, teach, give directions and distances, delight and please us, etc.; combination of photography and artwork depicts concepts of sound generation, transmission, reception, interpretation; many examples illustrate--music of guitar, cries of animals, noises of machinery; excellent for small or large groups; synopsis, discussion questions, and suggestions for further study in teacher's guide

THE STORY OF SALT. 4 color filmstrips, 4 cassette tapes, guide $68. with disc recordings $56. BFA, 1975. elem jhs shs-10

SALT: HOW WE USE IT
SALT: ITS HISTORY
SALT: HOW WE MAKE IT
SALT PONDS: GOOD NEIGHBORS

The story of salt from historical, economical, ecological, and scientific viewpoints; salt's many uses reviewed--in food, refining petroleum, making soap, leather, dye, glass, paper products, antiseptic procedures, freezing, furniture refinishing, etc.; where salt is found, its crucial importance to all life forms, its influence on trade, war, migration, economic development are examined; how salt is actually made and processes of mining, drilling, pumping, and solar evaporation provide interesting segment; finally, importance of salt in specific ecosystems (salt marshes, salt ponds) rounds out thorough overview of this vital element; little-known, interesting facts revealed; unfamiliar terms explained as encountered in context; colorful artwork and photographs; excellent science material and social studies enrichment. Are you worth your salt? Find out the answer here! (This item also appears on the Social Studies Advisory List.)

THE WATER SERIES. 6 color filmstrips, 6 cassette tapes, guides $115. SVE, 1975. elem-6 jhs shs

WATER AND WEATHER
WATER: SHAPER OF EARTH
WATER: LIFE'S GREATEST NEED
WATER AND CIVILIZATION
WATER: ITS UNIQUENESS
WATER: ITS USES AND TREATMENT

Discusses importance of water on our planet, emphasizing water/life relationship and ways this precious liquid sustains and influences us and our surroundings; graphically demonstrates how water cycle makes our weather and changes our earth; traces water's effect on past civilizations; illustrates unique properties of water molecule and how its structure affects water's action; individual strips may be used at various levels in elementary or high school classes--e.g., WATER AND WEATHER in elementary science classes, WATER: ITS UNIQUENESS in high school chemistry, and WATER: LIFE'S GREATEST NEED in biology classes; good narration and photographs; individual guide for each filmstrip gives overview of series, synopsis of strips and suggests related activities and references, difficult vocabulary, and learning objectives; well worth the money

WHAT ARE ECOSYSTEMS? 6 color filmstrips, 3 cassette tapes, guide $66. Troll, 1975. jhs shs

THE POND ECOSYSTEM
THE STREAM ECOSYSTEM
THE SALT MARSH AND SEASHORE ECOSYSTEM
THE FOREST ECOSYSTEM
THE HUMAN URBAN ECOSYSTEM
COMPARING THE CITY TO NATURAL ECOSYSTEMS

Excellent study of earth's ecosystem, human beings' place in it, and our responsibility regarding it; components of various natural ecosystems depicted and their functions clearly explained; interaction of man-made community and natural community especially well explained; basic components of pond, stream, salt marsh, seashore, and forest ecosystems--producers, composers, decomposers--closely examined with emphasis on food chain and energy transfer; photosynthesis touched on; decomposition and recycling thoroughly reviewed through roles of bacteria, earthworms, insects, snails, fungi, etc.; interdependence of all life in delicate balance of nature illustrated in numerous food chain examples (insects feeding on plants, frogs feeding on insects, racoons feeding on frogs, etc.); impressive, in-depth study of man's dependence on and abuse of natural ecosystem (specific cases cited); strong, effective plea for conservation; all terminology clearly explained

WHAT ARE ECOSYSTEMS? (Cont'd)

in context, but some difficult terms ("coniferous," "deciduous," "lichens") should have been spelled on screen--teachers will need to familiarize students with terminology prior to viewing; fine photography generally, though one wishes for more detailed look at red-winged blackbird, kingbird, tadpoles, but, on other hand, marvelous close-ups of owl, turtle; excellent color; continual reinforcement of all points throughout program; strips can be used independently of each other; a fine bringing together of all elements of ecosystem--plant, animal, man, and man-made threats to nature's balance

KITS

AIR, EARTH, FIRE, AND WATER. 5 color filmstrips, 5 cassette tapes, 96 Real-Gold Idea-Bank coins, guide $100. Hawkhill, 1975. jhs shs-10

AIR
EARTH
FIRE
WATER
AIR, EARTH, FIRE, AND WATER

Unusual presentation on vital elements of air, earth, fire, and water which stresses their aesthetic as well as scientific and environmental value; to background music of Bach played on flute and harpsichord, narration and photography examine each element, its role in creation of our planet, its changes under various influences, its continuing function in life as we know it, and our abuse (pollution, exhaustion) of the element; very philosophical, at times poetic, interpretation of these powerful life forces; superb color photographs, especially well selected to heighten beauty and mystery of the elements; well-balanced content easily grasped by junior high school groups; well paced; informal, appealing male narrator; excellent enrichment resource for imaginative science teachers who emphasize humanistic approach; package of gold cardboard "coins" meant to make up an "idea bank" suggest activities (e.g., make a painting of negative spaces, make up a commercial for pure air sales, investigate pros and cons of chlorination and fluoridation); ideal introductory or summary source; excellent stimulus for creative thinking with receptive, able science students

EXPLORING SEA AND SPACE. 5 color filmstrips, 5 cassette tapes, 2 color maps 19" x 25," 1 color poster 22½" x 34," guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1975. elem jhs

WORLD BENEATH THE SEA
RICHES FROM THE SEA
EXPLORING DISTANT WORLDS
BENEFITS FROM SPACE
LOOKING AHEAD IN SEA AND SPACE

In-depth study of man's exploration of sea and space, emphasizing his use of both his imagination and engineering equipment to acquire knowledge enriching and beneficial to our everyday lives; shows parallels in methods of exploring sea and space, concentrating on scientific concepts and techniques of exploration, major findings and their significance, and future plans for space and ocean investigation; focuses on information and benefits gained in communication technology, weather prediction, archeological research, etc.; excellent review of riches gleaned from the sea--fish, salt, oil and natural gas, valuable minerals and metals, archeological treasures--and "spin-off" benefits of space exploration, such as weather satellites, sophisticated medical equipment, television satellites, etc.; large color poster identifies Apollo astronauts on one side and shows view of earth from 25,000 miles out in space on reverse side; two maps depict Atlantic and Pacific Oceans,

EXPLORING SEA AND SPACE. (Cont'd)

defining ridges, rifts, valleys, canyons, etc., of both ocean floors; useful resource for in-depth study of sea and space--superb National Geographic photography as usual

READING, RESEARCHING AND REPORTING IN SCIENCE: THE UNIVERSE. 4 color filmstrips, four 12" disc recordings 33 1/3 rpm, 1 skill book, 8 books, 50 activity cards, guide $107. with cassette tapes $115. BFA, 1975. elem

THE SOLAR SYSTEM
TIME
MYTHS AND CONSTELLATIONS
SKY VIEWERS--FROM SUPERSTITIONS TO SCIENCE

Excellent multimedia approach to teaching reading/language skills through science content; filmstrips are hub around which all other activities revolve; excellent photographs and sound effects; historical background emphasized in reviewing humanity's understanding of the universe, going back to early civilizations' concepts--i.e., Babylonian, Egyptian, and Greek mythology; changing theories concerning origin of universe interestingly reviewed; historical look at contributions of astronomy reveals constantly changing information available to scientists as more is learned about other galaxies; skill book contains 20 pages of skill sheets for each filmstrip; high-interest/low-vocabulary stories extend and enrich content theme; 50 activity cards present both individual and group tasks extending concept and skill understanding; teacher's guide provides other suggestions, a bibliography, and filmstrip synopsis; exciting, stimulating, informative; middle-grade teachers will love this one. (This item also appears on the Languages Advisory List.)

VANISHING ANIMALS OF NORTH AMERICA. 5 color filmstrips, 5 cassette tapes, 1 color map 23" x 31," 1 color map 29½" x 42½," guides $67.50. with 10" disc recordings $67.50. Natl. Geog., 1975. elem jhs shs

TRAGEDY OF THE PAST
HUNTED ANIMALS
DAMAGE TO ECOSYSTEMS
PROTECTED ANIMALS
PROSPECTS FOR THE FUTURE

Stimulating portrayal of how man has upset earth's ecosystem and endangered certain North American wildlife species through his hunting and pollution; begins by reviewing past slaughter of wildlife--buffalo, grizzly bears, passenger pigeons, alligators, beaver, etc.--especially in 19th Century and earlier as pioneers cleared the land; examines today's hunted game (bighorn sheep, deer, quail, pheasant, etc.), noting that their extinction is threatened by sportsmen, not by commercial or domestic interests; reviews the safeguards enacted by law to protect many threatened species (California condor, deer, elk, geese), carefully explaining steps taken to ensure refuge in national parks, protected nesting and feeding grounds, and through continuing game and wildlife research substantially maintained by fees derived from hunting licenses; concludes with investigation of ecological principles involved, future problems, and potential solutions; objective, unemotional presentation that comes to grips with a serious national crisis; outstanding photography and narration; comprehensive teacher's guides, one for each filmstrip; two large maps, one of the world and other of Alaska; reverse side of map of Alaska depicts Ice Age mammals of Alaskan tundra, reverse side of map of world is artist's conception of many ways in which mankind fouls earth (e.g., dumping at sea, oil spills, mercury waste); superb impetus for motivating students to study their own environment, respect its vanishing wildlife, and seek solutions to this continuing dilemma

THE HUMAN ENVIRONMENT. 3 kits each containing 6 color filmstrips, 6 cassette tapes, 24 activity sheets, 16 idea cards, guide. Nystrom, 1975.
elem-6 jhs shs-10

THE WORLD OF ME. $160	
THE ENVIRONMENT OF HUMANS	DIGESTION/CIRCULATION
CONTROL/COORDINATION	BODY MOVEMENT
RESPIRATION	MATURATION/REPRODUCTION
THE MENTAL/SOCIAL ME. $160	
AWARENESS	AM I PART OF A PEOPLE PROBLEM?
BETWEEN THE TWO WORLDS	RICHES BEYOND MEASURE
UNDERSTANDING	REFLECTIONS
THE PHYSICAL ME. $115	
INTRODUCTION	DIGESTIVE SYSTEM/CIRCULATORY SYSTEM
NERVOUS SYSTEM	SKELETAL SYSTEM/MUSCULAR SYSTEM
RESPIRATION	ENDOCRINE SYSTEM/REPRODUCTIVE SYSTEM

Three-kit program stressing total health--physical, mental, and social--in an analysis of the human "ecosystem"; students learn about the many interrelationships in nature and begin to see similar interdependences existing between their own internal physical environment, mental environment, external physical environment, and social setting; interrelationships between systems/organs of the body and various essential body processes explained; mental health in the form of characteristics and attitudes peculiar to oneself and those shared by most other human beings reviewed; throughout, the aim is to illustrate how inextricably we are bound up in both our own individual, complex world of body and mind and in the world of people outside ourselves who deeply affect our well-being; filmstrips, checklists, audio cassettes, attitude inventories, pre/post assessment, idea cards, and activity sheets expand concepts and provide for involvement; effective supplement to health education programs; material touches on vital aspects of life; personalized yet grounded in fact; Kit 2, THE MENTAL/SOCIAL ME, correlates with several aspects of the curriculum; program is a great aid to understanding mental/social/physical makeup of human beings. (This item also appears on the Health, Safety, and Physical Education Advisory List.)

SLIDE SETS (SOUND)

BIOCLOCKS: UNDERSTANDING THE RHYTHMS OF LIFE. 2 units each containing 80 color slides, 1 cassette tape, one 12" disc recording 33 1/3 rpm, 1 carousel cartridge; guide $119.44. Ctr. Humanities, 1976. shs

Discusses various innate rhythms in plants, animals, insects, and human beings, suggesting that such rhythms are controlled by some built-in, mechanical "bioclock"; length of cycle varies in different species ranging from daily (circadian) to seasonal and annual, with one desert plant having a blooming cycle of every 100 years; hypothesizes that cyclic behavior may be endogenous (internally controlled) or exogenous (externally influenced); explains that although bioclocks are not fully understood, research indicates cyclic behavior functions at a cellular level; demonstrates ways rhythms may be changed or upset--e.g., "jet lag"; presents series of questions at intervals throughout program when projector may be stopped for discussion; excellent, comprehensive guide has full script, suggested laboratory experiments, related readings, etc.; useful for any biology classes; open-ended discussion questions and topics encourage further investigation; excellent for introducing studies of periodicity in plants and animals

THE ETHICS OF GENETIC CONTROL. 2 units each containing 80 color slides, 1 cassette tape, one 12" disc recording 33 1/3 rpm, 1 carousel cartridge; guide $119.44. Ctr. Humanities, 1976. shs

Examines sociological and biological implications of controlled birth and the moral, ethical, and scientific conflicts arising from attempts to control human populations; traces past genetic experiments calculated to produce super races of people, some with tragic results--e.g., the Hapsburgs; explores possibility of transmitting hereditary conditions and diseases, pointing out governmental expense necessary to assist afflicted families; examines technology of controlling populations through genetic counseling and chromosomal studies of the fetus, with possible subsequent abortion of unwanted children; cites one particular case where couple want to abort a normal fetus upon learning it is a girl; raises thought-provoking, open-ended questions; could be used with advanced biology and sociology classes or by teachers counseling married students; "heavy" material not to be used indiscriminately; consider possible use before purchase. (This item also appears on the Social Studies Advisory List.)

AN INQUIRY INTO THE ORIGIN OF MAN: SCIENCE AND RELIGION. 2 units each containing 80 color slides, 1 cassette tape, one 12" disc recording 33 1/3 rpm, 1 carousel cartridge; guide $119.44. Ctr. Humanities, 1974. shs

Comprehensive presentation of two major arguments concerning origin of man: Was it by a sudden and divine act of God or by slow evolution of life forms? Two-part program combines excellent slides and thoughtful narration, tracing Biblical account, quoting extensively from Genesis, illustrating with classical art (Raphael, Michelangelo's magnificent interpretation on ceiling of Sistine Chapel); Judaic and Christian emphasis on God explained, as well as Eastern religions' interpretation of creation; program concentrates on theory of evolution, particularly on Charles Darwin's conclusions and the controversy they generated in Victorian England; points pro and con cited in narration, which relies heavily on direct quotation of such contemporaries of Darwin's as Thomas Huxley, Alfred Wallace, Richard Owen, Oxford's Bishop Samuel Wilberforce; evolutionary theory obviously favored, though Scriptural account well represented; public denunciation of Darwin by outraged Christians well depicted; many related concepts discussed (e.g., "paint-pot" theory, Social Darwinism, Mendel's study of genetics); in-depth presentation which certainly requires prior classroom preparation for maximum success; language, allusions, terminology definitely advanced, yet excitement of Darwin's revelations and debates aroused by them compel attention; excellent teacher's manual (complete script, objectives, activities, etc.); superior slides; many scheduled stops signaled on frames permit questions, discussion, allowing students to digest information at their own speed; teacher supervision, careful pre-planning and post-planning mandatory; preview program before purchasing; attractive, professional production--thought-provoking and obviously thoroughly and thoughtfully planned

THREE BILLION YEARS OF LIFE: THE DRAMA OF EVOLUTION. 3 units each containing 80 color slides, 1 cassette tape, one 12" disc recording 33 1/3 rpm, 1 carousel cartridge; guide $176.91. Ctr. Humanities, 1976. shs

Interesting slides and colorful narration help to make this large undertaking quite good; three-part slide/tape program begins with review of earliest life forms from organic molecules in the ocean billions of years ago, showing how life became gradually more complex; traces migration of plant and animal life

THREE BILLION YEARS OF LIFE: THE DRAMA OF EVOLUTION. (Cont'd)

to dry land, with emphasis on Mesozoic Era; concludes with account of Cenozoic Era when mammals began dominating earth, concentrating on origin of man from primate roots; illustrations include photographs of fossils, dioramas, modern species, etc.; emphasis on cultural as well as physical evolution; noted scientists--Loren Eiseley, George Gaylord Simpson, Richard Carrington, Alexander Marshack--quoted extensively; well substantiated, professionally produced; origin of life in the sea, its migration to land, and development of homo sapiens presented as unarguable facts without mention of other theories; excellent introduction to or summary of evolution of life; program provides for frequent stops to permit discussion; thought-provoking ideas and questions presented; preview material before purchasing; outstanding resource

STUDY PRINTS

FLOWERS OF OUR LAND. 16 color prints 12" x 17," guide $5.50. Cook, 1976. elem jhs shs

Study prints providing specific information on selected classes of flowering plants; information on back of poster-size prints covers topic pictured; wide variety of plants and background information on each one--seasonal plants, types of reproduction, annuals and perennials, flowering trees and shrubs, flowering grasses, wild flowers, horticultural ornamentals, hanging gardens, water plants, and rock gardens; prints also discuss esthetic and economic importance of flowers used in decorations and designs; excellent, full-length teacher's guide suggests open-ended activities, provides glossary of terms relevant to each print; for middle grades and high schools; clear, color photographs, easy text; much information, many helpful tips, and brilliantly colored flower photography

YOUR FIVE SENSES. 16 color prints 12" x 17," guide $5.50. Cook, 1976. elem jhs-7

Explores the five senses, how we use them to learn about things around us and how they protect us from danger; each sense illustrated in colorful, poster-size study prints showing boys and girls in action scenes--caressing a puppy (touch), looking with fascination at a frog (sight), licking a lollipop (taste), etc.; excellent multiracial representation among children depicted; text material on reverse side of study print gives consideration to relevant information--e.g., sense receptors (neurons), taste buds; three large study prints illustrate each of the five senses, with one print serving as introduction; excellent, complete teacher's manual suggests teaching activities and open-ended investigations

BOOKS REVIEWED IN OTHER SOURCES

The books listed below have received favorable reviews in one or more of the following reviewing sources. Code letters for the reviewing sources are cited after the bibliographic entry for each title. The reviewing sources and their code letters are as follows:

AMERICAN LIBRARIES	AL
APPRAISAL	A
BOOK REVIEW DIGEST	BRD
BOOKLIST	BKL
BULLETIN OF THE CENTER FOR CHILDREN'S BOOKS	BCCB
CHILDREN'S BOOK REVIEW SERVICE	CBRS
CHOICE	C
HORN BOOK	HB
KIRKUS REVIEWS	KR
LIBRARY JOURNAL	LJ
PUBLISHERS WEEKLY	PW
SCHOOL LIBRARY JOURNAL	SLJ
SCIENCE AND CHILDREN	SC
SCIENCE BOOKS AND FILMS	SBF
TOP OF THE NEWS	TN
WILSON LIBRARY BULLETIN	WLB

An asterisk after the code letters for the reviewing source indicates that the title was highly recommended in that particular reviewing source.

Adler, Irving. PETROLEUM: GAS, OIL, AND ASPHALT. John Day, 1975. 48 p. $5.95. prim-3 elem A BKL KR SBF* SLJ

Aliki. CORN IS MAIZE: THE GIFT OF THE INDIANS. Crowell, 1976. 33 p. $5.95. prim elem-4 BCCB BKL HB KR SLJ

Alston, Eugenia. GROWING UP CHIMPANZEE. Crowell, 1975. unp. $5.50. prim elem A KR PW SBF* SLJ

Amon, Aline. READING, WRITING, CHATTERING CHIMPS. Atheneum, 1975. 119 p. $7.95. elem jhs A BKL* BRD CBRS HB KR SBF** SLJ*

Bendick, Jeanne. THE FIRST BOOK OF AIRPLANES. Rev. ed. Watts, 1976. 65 p. $3.90. prim-3 elem jhs-7 BKL SLJ

Bergaust, Eric. COLONIZING THE PLANETS: THE FACTUAL STORY OF MANNED INTERPLANETARY FLIGHT INTO THE 21ST CENTURY. Putnam, 1975. 93 p. $4.96. elem-6 jhs shs BKL KR SLJ

Berger, Gilda and Melvin. "FITTING IN": ANIMALS IN THEIR HABITATS. Coward, 1976. 47 p. $4.69. prim elem-4 BCCB KR SLJ

Berger, Melvin. POLICE LAB. John Day, 1976. 127 p. $6.95. elem jhs BKL KR SLJ*

Berger, Melvin. TIME AFTER TIME. Coward, 1975. 46 p. $4.69. prim elem-4 BCCB BKL KR SLJ

Branley, Franklyn M. ROOTS ARE FOOD FINDERS. Crowell, 1975. 33 p. $4.50. prim elem-4 A BKL KR SBF** SLJ

Burkett, Molly and John. FOXES THREE. Lippincott, 1975. 160 p. $6.95. elem jhs-7 BKL BRD CBRS KR SLJ

Claflin, Edward. RUFFIAN: QUEEN OF THE FILLIES. Dial, 1975. 104 p. $6.95. $2.95 paper. elem jhs shs BKL PW SLJ

Coerr, Eleanor. BIOGRAPHY OF A KANGAROO. Putnam, 1976. 63 p. $4.97. prim-3 elem BKL KR SLJ

Colby, C. B. HIDDEN TREASURE: WHAT, WHERE AND HOW TO FIND IT. Coward, 1975. 48 p. $4.29. elem jhs BKL KR SLJ

Colby, C. B. TWO CENTURIES OF WEAPONS, 1776-1976. Coward, 1975. 48 p. $4.96. elem jhs BCCB BKL KR SLJ

Conklin, Gladys. I LIKE BEETLES. Holiday, 1975. unp. $6.95. prim A KR SBF** SLJ

Cromie, William J. SKYLAB: THE STORY OF MAN'S FIRST STATION IN SPACE. McKay, 1976. 146 p. $9.95. jhs shs BKL KR SLJ

Dean, Anabel. ANIMALS THAT FLY. Messner, 1975. 64 p. $5.79. prim-3 elem KR SLJ

Derby, Pat, with Peter Beagle. THE LADY AND HER TIGER. Dutton, 1976. 284 p. $8.95. shs BKL LJ PW SLJ

Devereux, Frederick L., Jr. BACKYARD PONY: SELECTING AND OWNING A HORSE. Watts, 1975. 87 p. $5.95. elem jhs BKL KR SLJ

Doty, Roy. WHERE ARE YOU GOING WITH THAT OIL? Doubleday, 1976. unp. $4.95. prim elem-4 SLJ

Doty, Roy. WHERE ARE YOU GOING WITH THAT TREE? Doubleday, 1976. unp. $4.95. prim elem-4 SLJ

Dwiggins, Don. WHY KITES FLY: THE STORY OF THE WIND AT WORK. Childrens, 1976. 31 p. $4.95. elem BKL SLJ

Edwards, Joan. CARING FOR TREES ON CITY STREETS. Scribners, 1975. 64 p. $6.95. elem jhs-7 A BKL CBRS KR SBF SLJ

Fegley, Thomas D. THE WORLD OF THE WOODLOT. Dodd, 1975. 126 p. $5.50. elem jhs A BKL* BRD HB KR SBF* SLJ

Freedman, Russell. ANIMAL FATHERS. Holiday, 1976. 31 p. $4.95. prim-3 elem A BKL CBRS KR SLJ

Friedman, Judi. THE EELS' STRANGE JOURNEY. Crowell, 1976. 33 p. $5.95. prim BKL HB KR SLJ

Gardner, Robert, and David Webster. SHADOW SCIENCE. Doubleday, 1976. 124 p. $5.95. elem BKL KR

Goetz, Delia. VALLEYS. Morrow, 1976. 64 p. $4.59. prim elem-4 A BKL KR SLJ

Graham, Ada and Frank. THE MILKWEED AND ITS WORLD OF ANIMALS. Doubleday, 1976. 103 p. $6.70. elem jhs KR SLJ

Graham, Frank, Jr. GULLS: A SOCIAL HISTORY. Random, 1975. 179 p. $8.95. jhs-9 shs BKL KR LJ PW SBF*

Gurney, Gene and Clare. THE LAUNCHING OF SPUTNIK, OCTOBER 4, 1957: THE SPACE AGE BEGINS. Watts, 1975. 86 p. $3.90. elem jhs BCCB KR SLJ

Haines, Gail Kay. EXPLOSIVES. Morrow, 1976. unp. $4.59. prim A BKL HB KR SBF SLJ

Hall, Elizabeth. FROM PIGEONS TO PEOPLE: A LOOK AT BEHAVIOR SHAPING. Houghton, 1975. 130 p. $6.95. elem-6 jhs shs-10 A BCCB BKL KR SBF* SLJ

Halmi, Robert. ZOOS OF THE WORLD. Four Winds, 1975. 117 p. $6.95. elem jhs A BCCB BKL KR SBF* SLJ

Hamberger, John. BIRTH OF A POND. Coward, 1975. unp. $5.95. prim elem BKL KR PW SLJ

Hammond, Winifred. THE STORY OF YOUR EYE. Coward, 1975. 64 p. $4.99. prim-3 elem KR SLJ

Hoban, Tana. BIG ONES, LITTLE ONES. Greenwillow, 1976. unp. $5.11. prim BCCB BKL CBRS HB KR SLJ WLB

Hopf, Alice L. MISPLACED ANIMALS AND OTHER LIVING CREATURES. McGraw, 1975. 136 p. $5.72. elem jhs BCCB BKL CBRS KR SBF** SLJ

Hough, Richard. GALÁPOGOS: THE ENCHANTED ISLANDS. Addison, 1975. 48 p. $4.13. elem jhs BKL SBF* SLJ

Kelly, James E., and William R. Park. THE TUNNEL BUILDERS. Addison, 1976. unp. $5.50. prim elem BKL KR SLJ

Kenworthy, Leonard S. CAMELS AND THEIR COUSINS. Harvey House, 1975. 48 p. $4.79. elem jhs-7 A SBF** SLJ

Klaits, Barrie. WHEN YOU FIND A ROCK: A FIELD GUIDE. Macmillan, 1976. 58 p. $5.95. elem BKL CBRS KR SLJ

Lewis, Stephen. ZOO CITY. Greenwillow, 1976. unp. $6.95. prim BCCB CBRS HB KR SLJ WLB

Limburg, Peter R. CHICKENS, CHICKENS, CHICKENS. Nelson, 1975. 144 p. $6.95. jhs shs BKL KR SBF* SLJ

McGowen, Tom. ALBUM OF PREHISTORIC MAN. Rand, 1975. 60 p. $5.97. elem BKL

Martin, Lynne. PEACOCKS. Morrow, 1975. 96 p. $4.95. elem A BKL KR SBF** SLJ

Miller, Robert W. WESTERN HORSE BEHAVIOR AND TRAINING. Dolphin, 1974. 305 p. $4.95 paper. shs LJ

Morey, Walt. OPERATION BLUE BEAR: A TRUE STORY. Dutton, 1975. 87 p. $6.95. elem jhs-7 BCCB BKL KR SLJ

Morris, Robert A. DOLPHIN. Harper, 1975. 62 p. $3.79. prim A BKL KR SBF* SLJ

Napier, Prue. CHIMPANZEES. McGraw, 1976. 48 p. $5.72. elem BCCB BKL KR SLJ

Orange, Anne. THE FLOWER BOOK. Lerner, 1975. 32 p. $3.95. prim CBRS PW SLJ

Orange, Anne. THE LEAF BOOK. Lerner, 1975. 32 p. $3.95. prim CBRS PW SLJ

Overbeck, Cynthia. THE FRUIT BOOK. Lerner, 1975. 32 p. $3.95. prim CBRS PW SLJ

Overbeck, Cynthia. THE VEGETABLE BOOK. Lerner, 1975. 32 p. $3.95. prim CBRS PW SLJ

Patent, Dorothy Hinshaw. HOW INSECTS COMMUNICATE. Holiday, 1975. 127 p. $5.95. elem jhs A BCCB* BKL CBRS KR* PW SBF** SLJ

Pine, Tillie S., and Joseph Levine. ENERGY ALL AROUND. McGraw, 1975. unp. $5.72. prim elem BKL SBF* SLJ

Prince, J. H. LANGUAGES OF THE ANIMAL WORLD. Nelson, 1975. 160 p. $6.95. elem-6 jhs KR SLJ

Pringle, Laurence. CITY AND SUBURB: EXPLORING AN ECOSYSTEM. Macmillan, 1975. 56 p. $5.95. prim-3 elem BCCB BKL BRD HB KR SBF* SLJ

Pringle, Laurence. THE MINNOW FAMILY: CHUBS, DACE, MINNOWS, AND SHINERS. Morrow, 1976. 64 p. $4.59. prim-3 elem A BCCB BKL BRD HB KR SLJ

Pringle, Laurence. WATER PLANTS. Crowell, 1975. 32 p. $4.50. prim A KR SBF* SLJ

Reeves, Martha Emilie. THE TOTAL TURTLE. Crowell, 1975. 115 p. $6.50. elem jhs shs-10 BCCB BKL BRD HB PW SBF SLJ

Rockwell, Jane. DOGS AND PUPPIES. Watts, 1976. 89 p. $3.90. elem jhs-7 BKL KR SLJ

Ross, Wilda. CRACKS AND CRANNIES: WHAT LIVES THERE. Coward, 1975. unp. $4.99. prim elem-4 A KR SBF SLJ

Schneider, Herman and Nina. SCIENCE FUN FOR YOU IN A MINUTE OR TWO: QUICK SCIENCE EXPERIMENTS YOU CAN DO. McGraw, 1975. 64 p. $5.72. prim elem BCCB BKL SBF** SLJ

Scott, Jack Denton. DISCOVERING THE AMERICAN STORK. Harcourt, 1976. 64 p. $6.50. elem jhs BKL KR PW SLJ*

Scott, Jack Denton. THE SURVIVORS: ENDURING ANIMALS OF NORTH AMERICA. Harcourt, 1975. 110 p. $7.50. elem jhs BCCB BKL KR PW SBF SLJ*

Selsam, Millicent E. THE HARLEQUIN MOTH: ITS LIFE STORY. Morrow, 1975. 48 p. $5.11. prim elem A BCCB BKL BRD HB KR SBF* SLJ

Silverstein, Alvin, and Virginia B. Silverstein. APPLES: ALL ABOUT THEM. Prentice, 1976. 112 p. $5.95. elem jhs-7 BKL HB KR SLJ

Silverstein, Alvin, and Virginia B. Silverstein. GERBILS: ALL ABOUT THEM. Lippincott, 1976. 159 p. $6.95. $3.95 paper. elem jhs A BKL* HB KR SLJ*

Silverstein, Alvin, and Virginia B. Silverstein. POTATOES: ALL ABOUT THEM. Prentice, 1976. 118 p. $5.95. elem jhs-7 BCCB BKL KR SLJ

Simon, Seymour. LIFE ON ICE: HOW ANIMALS SURVIVE IN THE ARCTIC. Watts, 1976. 65 p. $4.90. elem BKL KR SLJ

Stevenson, Peter and Mike. THE AMPHORA: A BOAT YOU CAN BUILD FOR UNDERWATER RESEARCH. Scribners, 1975. 64 p. $6.95. elem jhs BKL KR SLJ

Street, Philip. ANIMAL PARTNERS AND PARASITES. Taplinger, 1975. 209 p. $10.95. Teacher use. LJ

Trost, Lucille Wood. THE AMAZING WORLD OF AMERICAN BIRDS. Putnam, 1975. 128 p. $6.29. elem jhs BKL KR SBF SLJ

Von Braun, Wernher, and Frederick I. Ordway III. THE ROCKETS' RED GLARE. Doubleday, 1976. 212 p. $9.95. jhs-9 shs BKL C KR LJ PW SBF

Walsh, Anne Batterberry. A GARDENING BOOK: INDOORS AND OUTDOORS. Atheneum, 1976. 100 p. $6.95. elem BKL BRD HB KR SLJ

Waters, John F. CREATURES OF DARKNESS. Walker & Co., 1975. 96 p. $5.83. elem A SBF* SLJ

White, William, Jr. THE ANGELFISH: ITS LIFE CYCLE. Sterling, 1975. 64 p. $5.69. elem-6 jhs shs-10 A BKL SLJ

Zim, Herbert S., and Lucretia Krantz. SEA STARS AND THEIR KIN. Morrow, 1976. 64 p. $4.59. prim-3 elem jhs-7 A BKL KR SLJ

DIRECTORY OF PUBLISHERS AND PRODUCERS

AIMS - AIMS Instructional Media Services, Inc., 626 Justin Avenue, Glendale, California 91201

AMSCO - AMSCO School Publications, Inc., 315 Hudson Street, New York, New York 10013

Abelard - Abelard-Schuman Limited, 666 Fifth Avenue, New York, New York 10019

Abrams - Harry N. Abrams, Inc., 110 East 59th Street, New York, New York 10022

Addison - Addison-Wesley Publishing Company, Inc., 2725 Sand Hill Road, Menlo Park, California 94025

Anchor - Anchor Books, 501 Franklin Avenue, Garden City, New York 11530

Atheneum - Atheneum Publishers, 122 East 42nd Street, New York, New York 10017

BFA - BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90406

B.Y.U. Pr. - Brigham Young University Press, 204 University Press Building, Provo, Utah 84602

Bantam - Bantam Books, Inc., 666 Fifth Avenue, New York, New York 10019

Barr - Barr Productions, P.O. Box 5667, Pasadena, California 91107

Benchmark - Benchmark Films, Inc., 145 Scarborough Road, Briarcliff Manor, New York 10510

Blair - John F. Blair, Publisher, 1406 Plaza Drive, Winston-Salem, North Carolina 27103

Bosustow - Stephen Bosustow Productions, 1649 11th Street, Santa Monica, California 90404

Branch Pr. - The Branch Press, P.O. Box 229, Bayside, New York 11361

Carolrhoda - Carolrhoda Books, Inc., 241 First Avenue North, Minneapolis, Minnesota 55401

Centron - Centron Educational Films, 1621 West Ninth Street, Lawrence, Kansas 66044

Childrens - Childrens Press, Inc., 1224 West Van Buren Street, Chicago, Illinois 60607

Churchill - Churchill Films, 662 North Robertson Boulevard, Los Angeles, California 90069

Cook - David C. Cook Publishing Company, 850 North Grove Avenue, Elgin, Illinois 60120

Coronet - Coronet Instructional Media, 65 East South Water Street, Chicago, Illinois 60601

Coward - Coward, McCann & Geoghegan, Inc., 200 Madison Avenue, New York, New York 10016

Crowell - Thomas Y. Crowell Company, 666 Fifth Avenue, New York, New York 10019

Ctr. Humanities - The Center for Humanities, Inc., 2 Holland Avenue, White Plains, New York 10603

Dial - The Dial Press, One Dag Hammarskjold Plaza, New York, New York 10017

Disney - Walt Disney Educational Materials Company, 800 Sonora Avenue, Glendale, California 91201

Dodd - Dodd, Mead and Company, 79 Madison Avenue, New York, New York 10016

Dolphin - Dolphin Books, 501 Franklin Avenue, Garden City, New York 11530

Doubleday - Doubleday & Company, Inc., 501 Franklin Avenue, Garden City, New York 11530

Dover - Dover Publications, Inc., 180 Varick Street, New York, New York 10014

Dutton - E. P. Dutton & Company, Inc., 201 Park Avenue South, New York, New York 10003

Field Ent. - Field Enterprises Educational Corporation, 510 Merchandise Mart Plaza, Chicago, Illinois 60654

Four Winds - Four Winds Press, 50 West 44th Street, New York, New York 10036

Golden - Golden Press, Inc., 850 Third Avenue, New York, New York 10022

Goodyear - Goodyear Publishing Company, Inc., 1640 Fifth Street, Santa Monica, California 90401

Greenwillow - Greenwillow Books, 105 Madison Avenue, New York, New York 10016

Handel - Handel Film Corporation, 8730 Sunset Boulevard, West Hollywood, California 90069

Harcourt - Harcourt Brace Jovanovich, Inc., 757 Third Avenue, New York, New York 10017

Harper - Harper & Row, Publishers, 10 East 53rd Street, New York, New York 10022

Harvey House - Harvey House, Inc., Publishers, 1201 South Hastings Way, Eau Claire, Wisconsin 54701

Hawkhill - Hawkhill Associates, Inc., Route 1, Black Earth, Wisconsin 53515

Holiday - Holiday House, Inc., 18 East 53rd Street, New York, New York 10022

Houghton - Houghton Mifflin Company, 2 Park Street, Boston, Massachusetts 02107

HyperDynamics - HyperDynamics, P.O. Box 392, Santa Fe, New Mexico 87501

John Day - The John Day Company, Inc., 666 Fifth Avenue, New York, New York 10019

Keller Assocs. - Keller Associates, P.O. Box 8005, Greensboro, North Carolina 27410

Klein - Walter J. Klein Company, Ltd., 6301 Carmel Road, Charlotte, North Carolina 28211

Knopf - Alfred A. Knopf, Inc., 201 East 50th Street, New York, New York 10022

Learning Corp. - Learning Corporation of America, 1350 Avenue of the Americas, New York, New York 10019

Learning Trends - Learning Trends, Division of Globe Book Company, Inc., 175 Fifth Avenue, New York, New York 10010

Lerner - Lerner Publications Company, 241 First Avenue North, Minneapolis, Minnesota 55401

Lippincott - J. B. Lippincott Company, 521 Fifth Avenue, New York, New York 10017

Little - Little, Brown and Company, 34 Beacon Street, Boston, Massachusetts 02106

Lothrop - Lothrop, Lee & Shepard Company, 105 Madison Avenue, New York, New York 10016

McGraw - McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, New York 10020

McKay - David McKay Company, Inc., 750 Third Avenue, New York, New York 10017

Macmillan - Macmillan Library Services, 866 Third Avenue, New York, New York 10022

Messner - Julian Messner, Inc., One West 39th Street, New York, New York 10018

Moody - Moody Institute of Science, 12000 East Washington Boulevard, Whittier, California 90606

Morrow - William Morrow & Company, Inc., 105 Madison Avenue, New York, New York 10016

NCSU-Agri. - North Carolina State University, Department of Agricultural Information, P.O. Box 5037, Raleigh, North Carolina 27607

NER - N. C. Board of Science and Technology, N. C. Department of Natural and Economic Resources, P.O. Box 12235, Research Triangle Park, North Carolina 27709

N.E.R. (Division of Resource Planning & Evaluation) - see NER

Nat'l Geog. - National Geographic Society, 17th and M Streets N.W., Washington, District of Columbia 20036

Nelson - Thomas Nelson, Inc., 30 East 42nd Street, New York, New York 10017

Nystrom - A. J. Nystrom Company, 3333 Elston Avenue, Chicago, Illinois 60618

Parents - Parents' Magazine Press, 52 Vanderbilt Avenue, New York, New York 10017

Prentice - Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632

Putnam - G. P. Putnam's Sons, 200 Madison Avenue, New York, New York 10016

Quadrangle - Quadrangle/The New York Times Book Company, 10 East 53rd Street, New York, New York 10022

Rand - Rand McNally and Company, P.O. Box 7600, Chicago, Illinois 60680

Random - Random House School and Library Services, Inc., 201 East 50th Street, New York, New York 10022

Reader's Digest Pr. - Reader's Digest Press, 201 Park Avenue South, New York, New York 10003

Ritchie - The Ward Ritchie Press, 474 South Arroyo Parkway, Pasadena, California 91105

Rodale - Rodale Press, 33 East Minor Street, Emmaus, Pennsylvania 18049

SVE - Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois 60614

Sat. Rev. Pr. - Saturday Review Press, 201 Park Avenue South, New York, New York 10017

Scribners - Charles Scribner's Sons, 597 Fifth Avenue, New York, New York 10017

Silver Burdett - Silver Burdett Company, 250 James Street, Morristown, New Jersey 07960

St. Martin's - St. Martin's Press, Inc., 175 Fifth Avenue, New York, New York 10010

Sterling - Sterling Publishing Company, Inc., 419 Park Avenue South, New York, New York 10016

Taplinger - Taplinger Publishing Company, Inc., 200 Park Avenue South, New York, New York 10003

Tchrs. Coll. - Teachers College Press, Teachers College, Columbia University, 1234 Amsterdam Avenue, New York, New York 10027

Time-Life - Time-Life Multimedia, Time & Life Building, Rockefeller Center, New York, New York 10020

Times Printing - Times Printing Company, Inc., Manteo, North Carolina 27954

Troll - Troll Associates, 320 Route 17, Mahwah, New Jersey 07430

Viking - Viking Press, Inc., 625 Madison Avenue, New York, New York 10022

Vintage - Vintage Books, 201 East 50th Street, New York, New York 10022

Walck - Henry Z. Walck, Inc., 750 Third Avenue, New York, New York 10017

Walker & Co. - Walker & Company, 720 Fifth Avenue, New York, New York 10019

Watts - Franklin Watts, Inc., 845 Third Avenue, New York, New York 10022

Weybright - Weybright & Talley, Inc., 750 Third Avenue, New York, New York 10017

Windmill - Windmill Books, Inc., 201 Park Avenue South, New York, New York 10003

Materials Review and Evaluation Services
Division of Educational Media
State Department of Public Instruction

Raleigh, North Carolina
September 1977

ADVISORY LIST OF INSTRUCTIONAL MEDIA

FOR

SCIENCE

This bibliography includes instructional media appropriate to the Science program in the schools. The items are listed by type of media. The order of the listing is as follows:

activity cards	filmstrips (silent)	programmed materials
art prints	filmstrips (sound)	puzzles
books	games	realia
books (for teacher use)	globes	recordings (cassette tapes)
books (reference)	kits	recordings (disc)
books (supplementary texts)	manipulative devices	recordings (reel-to-reel tapes)
books with recordings	maps	reprints
calendars	measuring tapes	shortstrips
charts	microforms	slide sets (2"x2")
dictionaries	mini-units	slide sets (sound)
duplicating masters	models	study prints
film loops (silent)	periodicals	transparencies
film loops (sound)	pictures	videotapes
films (16mm)	posters	workbooks with recordings

The absence from this list of a given type of media indicates that no media of that type were reviewed or that none were deemed worthy of being called to the attention of schools. The name of a school administrative unit appearing after an annotation indicates that educators in that school system reviewed the item annotated and submitted the information for inclusion on the ADVISORY LISTS. Occasionally, such items may not appear on display at the Materials Review and Evaluation Center in Raleigh. Educators should bear in mind that materials included on this list were selected from those which publishers chose to submit for evaluation and may assume that materials available for purchase not appearing on the list either were not submitted for evaluation or received unfavorable reviews. Information about negative reviews, which do not appear on this bibliography, can be obtained by writing or calling the Materials Review and Evaluation Center. At the end of this bibliography may be found an unannotated list of books which have had favorable reviews in reliable reviewing sources.

The levels at which the media may be used most effectively are indicated by "K" (Kindergarten), "prim" (primary: Grades 1-3), "elem" (elementary: Grades 4-6), "jhs" (junior high school: Grades 7-8[9]), and "shs" (senior high school: Grades [9]10-12). The insertion of an arabic numeral after the grade level indicates that the item is especially pertinent at that specific grade level--e.g., "prim-2," "elem-6."

In some cases prices were not available. Prices shown are those quoted by publishers and producers. Prices quoted do not include postage and are subject to change.

All items included on this bibliography except 16mm films and some items suggested for inclusion by local school administrative units are displayed in the Materials Review and Evaluation Center at 620 North West Street in Raleigh.

PLEASE DO NOT ORDER ITEMS ON THIS LIST FROM THE MATERIALS REVIEW AND EVALUATION CENTER OR FROM THE DIVISION OF TEXTBOOKS. Sources of the items are listed on the DIRECTORY OF PUBLISHERS AND PRODUCERS PARTICIPATING IN THE MEDIA REVIEW PROGRAM, a separate publication accompanying the complete set of ADVISORY LISTS OF INSTRUCTIONAL MEDIA. An abbreviated or code name for the publisher/producer appearing in the bibliographic entry on this list appears in the DIRECTORY, where the complete address follows the code name.

Schools may use this list to aid in selection of materials but are in no way restricted to purchasing items on this list.

BOOKS

Arehart-Treichel, Joan. POISONS AND TOXINS. Holiday, 1976. 160 p. $6.95. jhs shs

Information on toxins and poisons in animals, plants, chemical agents; recalls sources and uses of toxic agents from ancient history to modern warfare--e.g., red tide, *nux vomica*, snake venom, sea urchin venom, scorpion stings, pesticides; useful in life sciences, conservation, biology; photographs and drawings

Arnosky, Jim. I WAS BORN IN A TREE AND RAISED BY BEES. Putnam, 1977. unp. $4.97. prim-3 elem

Interesting tour of nature led by old mountaineer, "Crinkleroot," through whose eyes students discover the woods during the four seasons; readers are urged to look closely at and ponder the natural world; cartoon format interspersed with verse and prose; excellent interdisciplinary tool

Asimov, Isaac. ALPHA CENTAURI, THE NEAREST STAR. Lothrop, 1976. 191 p. $6.71. jhs shs

Another in Asimov's string of books on topics scientific, this one focuses on constellations, star names, brightness, distance and motion, size, the cause of starlight, life cycles, and possibility of life among the stars; brisk, fast-moving writing style continues a new trend in Asimov's latest works

Bartenbach, Jean. ROCKHOUND TRAILS. Atheneum, 1977. 122 p. $7.50. elem jhs

Directions for finding precious and semiprecious stones in United States, general locations, collecting and mining tips, gem descriptions, history of locales; includes stories of such stones as Apache tears, Herkimer diamonds, garnets, rubies, sapphires, desert roses, moonstones; brief description of rock classes, general rules for amateur rock hounds, glossary

Conklin, Gladys. CHEETAHS, THE SWIFT HUNTERS. Holiday, 1976. unp. $6.95. elem jhs-7

Interesting, easy story of how cheetah families live in the wild, sequence of mating, gestation, birth, growth of the young family; emphasizes maternal protectiveness, how mother teaches her young to hunt, care for themselves; points out solitary habits of the species; line drawings illustrate

Dröscher, Vitus B. THEY LOVE AND KILL: SEX, SYMPATHY AND AGGRESSION IN COURTSHIP AND MATING. Dutton, 1976. 363 p. $15.50. shs

Explores sexual relations of many species of insects, birds, fish, mammals; examines courtship rituals, marital dances, mating habits, monogamy, polyandry, polygamy, and practices similar to infidelity and divorce; describes much animal behavior in terms of similar human behavior, philosophy; scientifically accurate, readable insight into animal behavior; for advanced studies in biological sciences; illustrated

Francis, Peter. VOLCANOES. Penguin, 1976. 368 p. $4.95 paper. jhs shs

Clear, descriptive style enhances this treatment of volcanoes; documented with eyewitness accounts, text covers types of eruptions, lavas, pyroclastic fall deposits, landscape forms, and the science of predicting eruptions; numerous diagrams, maps, photographs supplement discussions in useful introductory text

Hanley, Wayne. NATURAL HISTORY IN AMERICA: FROM MARK CATESBY TO RACHEL CARSON. Quadrangle, 1977. 339 p. $14.95. jhs-9 shs

Accounts of discoveries, contributions to natural history in United States, revealing historical development of science in this country and insight into personalities who searched for truth; includes accounts of botanical travels in South, Catesby's explorations in early 1700's, scientific observations of Lewis and Clark,

NATURAL HISTORY IN AMERICA: FROM MARK CATESBY TO RACHEL CARSON. (Cont'd)

conflicts between followers and opponents of Darwin, other milestones in continuing development of natural history or our country; black-and-white photographs and color reproductions of paintings by outstanding naturalists--e.g., Audubon, Fuertes

Kerrod, Robin. THE UNIVERSE. Warwick Pr., 1976. (available from Watts). 160 p. $5.95. jhs shs

Enough simple content to interest the curious, enough serious material to intrigue amateur scientists in lavishly illustrated, full-color diagrams and photographs from world's great observatories; although an overview, no potentially important topic omitted from history of astronomy to solar system, galaxies, space exploration

Kligerman, Jack, ed. THE BIRDS OF JOHN BURROUGHS: KEEPING A SHARP LOOKOUT. Hawthorn, 1976. 240 p. $6.95. $3.95 paper. jhs-9 shs

A naturalist's observations in informal essays on birds observed throughout the year at his home in upstate New York; much about life, habits of thrushes, flycatchers, blue jays, others; bibliography of related literature; for leisure reading

Klots, Alexander B. BUTTERFLIES OF THE WORLD: A HANDY GUIDEBOOK TO MORE THAN 50 BUTTERFLY, SKIPPER, AND MOTH FAMILIES. Bantam, 1976. 159 p. $1.95 paper. elem-6 jhs shs-10

Survey of moths and butterflies in information on classification, life history, distinguishing characteristics, economic importance, natural defenses against enemies, special adaptations of Lepidoptera; detailed descriptions and excellent color photographs enable identification of many species of moths, butterflies in larval and adult stages; for studies in biology and life sciences; indexed

Limburg, Peter. WHAT'S IN THE NAMES OF STARS AND CONSTELLATIONS. Coward, 1976. 193 p. $5.49. jhs shs

Myths, tales, derivation of names of stars, planets, constellations, and ancient myths explaining heavenly bodies; scientific information on natural phenomena--doppler's effect, quasars, eclipses, planetary motion; though less fact than fiction, fascinating reading worthy of high school libraries

List, Albert, Jr., and Ilka List. A WALK IN THE FOREST: THE WOODLANDS OF NORTH AMERICA. Crowell, 1977. 197 p. $9.95. jhs shs

General description of plants and animals found in American forest with information about specific species in interesting, readable text answering many questions raised by beginning naturalists and observers of the out-of-doors; photographs and line drawings; suggestions for projects and activities increase understanding of natural processes and forest community in general

McClung, Robert M. LOST WILD WORLDS: THE STORY OF EXTINCT AND VANISHING WILDLIFE OF THE EASTERN HEMISPHERE. Morrow, 1976. 288 p. $7.46. jhs shs

Description of endangered species in Eastern Hemisphere and accounts of extinction of past species which lived there; animals described are grouped by geographical provinces, including Europe, Asia, Africa, Australia, New Zealand, and islands of Indian and South Pacific Oceans; describes efforts to conserve some species, successes attained; interesting, convincing plea for conserving remaining endangered species in their natural habitats; illustrated with drawings

Newcomb, Lawrence. NEWCOMB'S WILDFLOWER GUIDE: AN INGENIOUS NEW KEY SYSTEM FOR QUICK, POSITIVE FIELD IDENTIFICATION OF THE WILDFLOWERS, FLOWERING SHRUBS AND VINES OF NORTHEASTERN AND NORTH-CENTRAL AMERICA. Little, 1977. 490 p. $6.95. jhs shs

Field guide and key to common wildflowers of Northeastern United States, though much content also applies to mid-South, including North Carolina; classifies

NEWCOMB'S WILDFLOWER GUIDE: AN INGENIOUS NEW KEY SYSTEM FOR QUICK, POSITIVE FIELD IDENTIFICATION OF THE WILDFLOWERS, FLOWERING SHRUBS AND VINES OF NORTHEASTERN AND NORTH-CENTRAL AMERICA. (Cont'd)

flora as wildflowers (herbs), vines, shrubs, and selects noticeable characteristics of leaves and flowers for classification, identification; instructions for using key, glossary of technical terms, line drawings, and color photographs; outstanding text easily handled in the field, and of special interest to those interested in native flora, beginning botany students, "roadside" botanists

Patent, Dorothy Hinshaw. FISH AND HOW THEY REPRODUCE. Holiday, 1976. 128 p. $6.95. shs

Summary of mating habits of many species of fish in detailed descriptions of mating and sexual activities; describes sex changes in some fishes, spawning habits of many egg-layers, process of fertilization and development in fish which give live birth; illustrated with drawings

Pelham, David. THE PENGUIN BOOK OF KITES. Penguin, 1976. 227 p. $4.95 paper. jhs shs

History, design, and construction of kites in fascinating text tracing origin of kites and their builders, construction techniques, and flying; literally dozens of patterns of kites, superbly illustrated

THE PENGUIN BOOK OF THE NATURAL WORLD. Penguin, 1976. 183 p. $5.95 paper. shs

Brief introduction to basis for evolution which describes cell's functions, then treats classification of plants and animals from simplest, one-celled organisms to large, complex, multicellular species with man as ultimate in development; beautifully illustrated with color photographs and drawings; only objectionable feature may be drawing of nude man, woman, boy, and girl on Page 160 illustrating physical differences between childhood and maturity; excellent addition to biological science shelves in high school; examine critically before purchase

THE PENGUIN BOOK OF THE PHYSICAL WORLD. Penguin, 1976. 183 p. $5.95 paper. jhs

Introduction to physical sciences--earth sciences, meteorology, mathematics, mechanics, energy, light, sound, electricity, electronics, chemistry, physics; deals with basics comprehensible to junior high school students; color drawings, photographs, diagrams; attractive supplement to study of physical sciences

Riedman, Sarah R. HOW WILDLIFE SURVIVES NATURAL DISASTERS. McKay, 1977. 154 p. $7.95. jhs shs

Recounts devastating effects of wildlife, earthquakes, floods, droughts, hurricanes, tornadoes, diseases, other natural disasters on plants and animals in observations of the recovery of nature's balance following such disasters; series of isolated, unrelated cause-and-effect situations renders the text somewhat discontinuous; well researched, however, presenting true pictures of ravaged nature's gradual regeneration

Rounds, Glen. THE BEAVER: HOW HE WORKS. Holiday, 1976. unp. $4.95. prim-3 elem jhs-7

Account of activities and feeding habits of beavers--how they build their burrow, dam, and lodge, their wintertime activities and/or hibernation; dispels some myths about engineering ability, industry of beavers; line drawings; easy to read, authentic

Scott, Jack Denton. RETURN OF THE BUFFALO. Putnam, 1976. 64 p. $6.95. elem jhs shs

Story of decline and eventual rebuilding of bison herds in North America; recalls abundance of bison in early America, importance to Indians, slaughter by white man,

RETURN OF THE BUFFALO. (Cont'd)

and successful efforts of conservationists and protective legislation to remove buffalo from list of endangered species; information also on behavior, breeding habits, physical characteristics; black-and-white photographs

Simon, Seymour. LIFE AND DEATH IN NATURE. McGraw, 1976. unp. $6.33. prim

The cycling of nutrients in nature through processes of death and decay, coupled with birth and living, simply explained in this small book; text and illustrations steer readers rapidly from idea to idea; well suited for elementary students with reading or interest problems, combining science and reading enjoyably

Unkelbach, Kurt. THE AMERICAN DOG BOOK. Dutton, 1976. 385 p. $14.95. jhs-9 shs

Complete book for dog fanciers, containing brief history of European and American dog shows, beginnings of American Kennel Club, breeds recognized by American and Canadian Kennel Clubs, tips on selecting a puppy, and keeping it healthy, happy

Warner, Matt. CATS OF THE WORLD. Bantam, 1976. 159 p. $1.95 paper. elem jhs

The evolution and domestication of cats, their characteristics, anatomical features, care and grooming tips, distinguishing characteristics of many breeds of domestic cats and several species of wild cats; color photographs; readable summary or introduction to study of cats; leisure reading for cat lovers

Wayre, Philip. THE RIVER PEOPLE. Taplinger, 1976. 191 p. $9.95. jhs shs

Observations of otters in conditions approaching those in natural habitats; describes mating, rearing young, feeding, playing, methods of drying themselves; specimens studied include otters of North America, Thailand, Great Britain, India, Malaya; appealing black-and-white and color photographs

Weber, William J. WILD ORPHAN FRIENDS. Holt, 1976. 160 p. $6.95. elem jhs

Veterinarian's account of care, treatment of young birds, other animals who ventured or were brought to his private preserve; stories of convalescence of his patients reveal insight into nature, habits of deer, raccoon, owls, otters, squirrels, sea gulls, rabbits, quail; black-and-white photos

Books in a Series

Sánchez, José Luis García, and Miguel Angel Pacheco. THE WHO AM I SERIES. Santillana, 1975. unp. each $3.95. Available in Spanish for $4.95 each. prim
Titles: I AM A TREE; I AM AIR

Series of simple but extremely well-done books centering on one natural element--tree, water, air, etc.; each element "tells" the reader his life story in first person; simple, clear illustrations; text likewise easy for beginning readers; valuable addition to science literature available to exploring young readers

WONDER BOOKS. Dodd. elem jhs shs
Blassingame, Wyatt. WONDERS OF THE TURTLE WORLD. 1976. 79 p. $4.95
Brown, Joseph E. WONDERS OF SEALS AND SEA LIONS. 1976. 79 p. $4.95
Chace, G. Earl. WONDERS OF PRAIRIE DOGS. 1976. 76 p. $4.95
Fegely. Thomas D. WONDERS OF GEESE AND SWANS. 1976. 96 p. $4.95
Jacobson, Morris K., and William K. Emerson. WONDERS OF STARFISH. 1977. 80 p. $4.95
Rearden, Jim. WONDERS OF CARIBOU. 1976. 64 p. $4.95
Schaller, George and Kay. WONDERS OF LIONS. 1977. 96 p. $5.95

Titles from natural history series describing species, outstanding anatomical features, breeding habits, natural range, sources of food, economic importance; black-and-white photos; excellent print; wide margins; well organized and researched

ADDITIONAL BOOKS

Anderson, Madelyn Klein. ICEBERG ALLEY. Described on Social Studies Advisory List

Bartlett, Jonathan, ed. THE OCEAN ENVIRONMENT. Wilson, H. W., 1977. 221 p. $5.25 paper. jhs shs

Articles previously published in various magazines anthologized under headings such as "Farming the Sea," "Oceans as a Source of Energy," "Exploring the Seas," etc.; authors are generally authorities in their fields; well written and well edited; unfortunately, photographs, maps, diagrams accompanying originals have been eliminated, which at times materially reduces value of the reprinted articles

Bear, Fred. FRED BEAR'S FIELD NOTES. Doubleday, 1976. 288 p. $8.95. jhs shs

Diary relating episodes and details of bowhunting trips for big game animals in Africa, Canada, Alaska, Brazil, India; information on animals and natives living in areas; trophy animals include moose, elephant, Asiatic buffalo, grizzly bear, brown bear, kudu, polar bear, tigers; photographs; emphasizes restraint and conservation in taking wild life

Boyd, Waldo T. THE WORLD OF ENERGY STORAGE. Putnam, 1977. 159 p. $5.29. jhs shs

Explains the nature of energy storage and reclamation from water power to electric cars, chemical, and thermal energy storage; lucid; photographs and diagrams; seldom discussed facet of energy in valuable addition to the literature

Buckenholz, Bruce. DOCTOR IN THE ZOO. Viking, 1976. 190 p. $3.95 paper. jhs shs

Excellent photographs, brief text re-create a busy week in life of Dr. Dolensek, veterinarian at Bronx Zoo; warm, sensitive look at a man who respects and cares for wide variety of wild beasts

Burton, Maurice and Robert. INSIDE THE ANIMAL WORLD: AN ENCYCLOPEDIA OF ANIMAL BEHAVIOR. Described on Reference Books Advisory List

Busch, Phyllis S. WILDFLOWERS AND THE STORIES BEHIND THEIR NAMES. Scribners, 1977. 88 p. $9.95. elem jhs shs

Brief descriptions of selected species of flowering plants with stories of how each got its name; describes parts and functions of typical flower; lovely, delicate black-and-white and color drawings by Anne Ophelia Dowden

Butler, S. T., and Robert Raymond. FRONTIERS OF SCIENCE: THE ENERGY EXPLOSION. Anchor, 1976. 84 p. $2.95 paper. elem-6 jhs shs

Energy essentials for disinterested or reluctant readers in comic strip format explaining each concept clearly, concisely; 42 separate topics covered, one strip per topic; brief, to the point; sure to be read

Calder, Nigel. THE KEY TO THE UNIVERSE: A REPORT ON THE NEW PHYSICS. Viking, 1977. 199 p. $14.95. shs

Traces development of new physics theories historically, describing them in simple terms; particles within atom, their relation to evolution of universe, explained through little mathematics and numerous diagrams, photographs; although chemistry and physics background would be helpful, explanations do not require it

Coerr, Eleanor. JANE GOODALL. Described on Biography Advisory List

Collins, Michael. FLYING TO THE MOON AND OTHER STRANGE PLACES. Farrar, 1976. 159 p. $6.95. jhs shs

One of three astronauts on Apollo 11 mission describes his training, personal participation in historic event; although resigned from the program, Collins briefly speculates on future space exploration with a sense of commitment and excitement

Dunn, Judy. THE LITTLE DUCK. Described on K-ECE Advisory List

Engel, Lyle Kenyon, and Monty Norris. THE COMPLETE BOOK OF FLYING. Four Winds, 1976. 297 p. $9.95. jhs shs

Introduces basic steps in learning to fly through diary-like account of actual flight instruction with female instructor, solo flight, examination, etc.; practical information on taking lessons; conveys the excitement of flying

Engelbrektson, Sune. STARS, PLANETS, AND GALAXIES. Bantam, 1975. 159 p. $1.95 paper. jhs shs

Wide variety of stellar subjects in information gleaned about universe from the naked eye and from telescopes, man-made satellites, planetary probes, and men in space; brief and thus superficial but colored illustrations and diagrams make this a useful handbook; tiny print

Godfrey, Michael A. WINTER BIRDS OF THE CAROLINAS AND NEARBY STATES. Blair, 1977. 136 p. $24.95. jhs shs

Guide to birds found in Carolinas during the winter with tips on observation and information about different orders and families; both common and scientific names for each species; describes field marks, voice, h bitat, range of each species; color photographs

Halacy, D. S., Jr. EARTH, WATER, WIND, AND SUN: OUR ENERGY ALTERNATIVES. Harper, 1977. 186 p. $8.95. shs

Thorough, well-thought-out recital of methods for producing energy from renewable resources; balanced, detailed treatment of advantages and problems of each energy source--geothermal, water power, tidal power, sea thermal, wind power, biofuels, solar energy; a reasoned review of uses of alternative energy

Halstead, Bruce W., and Bonnie L. Landa. TROPICAL FISH: A GUIDE FOR SETTING UP AND MAINTAINING AN AQUARIUM FOR TROPICAL FISH AND OTHER ANIMALS. Golden, 1975. 160 p. $5.50. elem jhs shs

Handbook providing essential information on maintaining tropical fish in an aquarium; full-colored pictures of various fish families, brief descriptive text on each; other aquarium inhabitants discussed briefly; excellent print

Harper, Jess, and Bill Lovin. WRECK! THE NORTH CAROLINA DIVER'S HANDBOOK: A GUIDE TO DIVING IN THE GRAVEYARD OF THE ATLANTIC. Described on Social Studies Advisory List

Heintze, Carl. SUMMIT LAKE. Nelson, 1976. 160 p. $6.95. jhs shs

Description of land and life around lake at summit of Donner Pass in High Sierras as each season offers insight into wonders of plants, animals, and climate interacting in a small ecosystem; good black-and-white photos; disappointing lack of color

Hopf, Alice L. BIOGRAPHY OF AN AMERICAN REINDEER. Putnam, 1976. 59 p. $4.97. prim-3 elem

One year in life cycle of American reindeer living in Arctic; story-like narrative relates encounters with natural barriers, predators, calving process, behavior of bucks, etc.; excellent, easily read, in-depth look at ecological process; brown wash drawings

Hutchins, Ross E. TRAILS TO NATURE'S MYSTERIES: THE LIFE OF A WORKING NATURALIST. Dodd, 1977. 222 p. $6.95. jhs shs

Boyhood adventures in Montana Rockies and professional experiences as world-traveled biologist recorded by Ross Hutchins; excellent black-and-white photographs; enjoyable

Kals, W. S. THE RIDDLE OF THE WINDS. Doubleday, 1977. 201 p. $7.95. jhs shs

Written in unusually direct style as if talking personally to readers, text asks questions, searches for answers, while developing basic explanations of trade winds, global winds, hurricanes, other wind phenomena; diagrams and charts; entertains as it informs

Kohn, Bernice. APPLES...A BUSHEL OF FUN AND FACTS. Parents, 1976. 64 p. $4.96. elem jhs-7

Attractive look at America's favorite fruit, its history, varieties and names, methods of grafting, use of hybrids; clearly explained; myths explored; recipes included; nice illustrations; ideal in-depth study

Lauber, Patricia. EARTHWORMS: UNDERGROUND FARMERS. Garrard, 1976. 64 p. $3.94. prim elem

Explores ecology of earthworms and their harnassing in earthworm farms to enrich soil; basic biological facts given but not detailed; many photos, most in color; indexed

Manchester, Harland. NEW TRAIL BLAZERS OF TECHNOLOGY. Described on Biography Advisory List

Marx, Wesley. ACTS OF GOD, ACTS OF MAN. Coward, 1977. 276 p. $8.95. jhs shs

Case histories introduce how man's activities can multiply effects of natural disasters--floods, fires, earthquakes; stresses ways man has modified the land and ignored resulting hazards, increasing death, property loss when disaster strikes; well written if slightly wordy; important to those interested in environmental hazards

Medawar, P. B., and J. S. Medawar. THE LIFE SCIENCE: CURRENT IDEAS OF BIOLOGY. Harper, 1977. 196 p. $8.95. shs

Scholarly treatment of evolution, biological inheritance, molecular biology, eugenics, organ systems, cancer, behavior, aging, anatomical structures, physiological processes; brief but serious, learned; suitable for advanced biology students, those highly interested in biological sciences; glossary of technical terms; examine before purchase

Motz, Lloyd. ON THE PATH OF VENUS. Pantheon, 1976. 205 p. $7.95. jhs shs

Story-biographies of great astronomers--Ptolemy, Copernicus, Tycho Brahe, Kepler, Galileo, Isaac Newton; traces their discoveries as they observed Venus; vivid style and vocabulary capture readers' interest, imagination; superb introduction

Neimark, Anne E. SIGMUND FREUD: THE WORLD WITHIN. Described on Biography Advisory List

Nourse, Alan E. VITAMINS. Watts, 1977. 66 p. $4.47. jhs-9 shs

Looks at history of individual vitamins, their importance to human body, problems resulting from their absence; important terminology in dark, bold type; well written, more up-to-date than many treatments presently in print

Paulsen, Gary. THE SMALL ONES: REAL ANIMALS. Childrens, 1976. 48 p. $4.95. prim-3 elem

Personal observations in anecdotal form of intelligence exhibited by rabbits, mice, foxes--e.g., rabbits playing games, mice working together for common purpose, foxes enjoying practical jokes; entertaining, humorous; nice illustrations

Penney, Peggy L. SURGERY: FROM STONE SCALPEL TO LASER BEAM. Described on Social Studies Advisory List

Pettit, Ted S. WILDLIFE AT NIGHT. Putnam, 1976. 94 p. $5.89 elem-6 jhs shs-10

Survey of nocturnal animals, their habits, appearance, methods by which one can observe them; emphasizes mammals but includes birds and animals without backbones (moths, worms, spiders); ideal in-depth study for interested students

Poulet, Virginia. BLUE BUG TO THE RESCUE. Described on K-ECE Advisory List

Prescott, Gerald W. THE DIATOMS: A PHOTOMICROGRAPHIC BOOK. Coward, 1977. 48 p. $5.96. shs

Diatoms, a class of algae, introduced, discussed briefly; covers habitat, internal structure, reproduction, special features; one page devoted to preparation of slides; indexed; excellent photography; appealing even to unmotivated students

Pringle, Laurence. THE HIDDEN WORLD: LIFE UNDER A ROCK. Macmillan, 1977. 64 p. $6.95. elem jhs

Quick look at some animals that live under rocks, boards, logs, other objects on ground or in water; briefly describes each species in interesting information on both terrestrial and aquatic types; black-and-white drawings, photographs; bibliography

Pyke, Magnus. BUTTER SIDE UP! THE DELIGHTS OF SCIENCE. Sterling, 1977. 223 p. $6.89. elem-6 jhs

Simple answers to complicated questions about scientific phenomena we all take for granted--e.g., why does thunder rumble? Is glass a liquid? What's special about gunpowder? Some diagrams and photos--more would help significantly; an interesting "extra"

Rahn, Joan Elma. ALFALFA, BEANS, AND CLOVER. Atheneum, 1976. 119 p. $6.50. jhs shs

In-depth study of use, importance, characteristics of bean family, its history, classification, major subfamilies; general description of leaves, seeds, stems, nitrogen fixation, protein content; factual; clear line drawings; easily grasped

Schumann, Marguerite. THE LIVING LAND: AN OUTDOOR GUIDE TO NORTH CAROLINA. Dale, 1977. 178 p. $4.25 paper. jhs shs

Guide to North Carolina's natural sites open to public in general introduction to areas in coastal plain, piedmont, mountains, plus commercially operated mountain areas; covers natural history, describes specific forests, parks, etc.; text somewhat terse but sufficient; black-and-white photos; small, fine print

Skurka, Norma, and Jon Naar. DESIGN FOR A LIMITED PLANET: LIVING WITH NATURAL ENERGY. Ballantine, 1976. 215 p. $5.95 paper. jhs shs

Personal accounts of problems, successes experienced by 37 people who constructed solar homes or use wind power; text and pictures illustrate solutions for student or professional interested in alternative energy sources; projects described simply, positively; well illustrated in both color and black-and-white photographs, diagrams; lists organizations, manufacturers to contact for information

Stilley, Frank. THE SEARCH: OUR QUEST FOR INTELLIGENT LIFE IN OUTER SPACE. Putnam, 1977. 157 p. $6.95. jhs shs

Chronicles astronomers' search for evidence of intelligent life in outer space, discoveries, theoretical evidence, present prospects, and problems; physical theory and mathematics held to a minimum; logical, interesting; photographs

Stine, G. Harry. HANDBOOK OF MODEL ROCKETRY. 4th ed. Follett, 1976. 352 p. $6.64. $4.64 paper. jhs shs

Reflects many changes occurring in model rocketry since first edition (1965) in useful revision for beginners, although certainly helpful text for more seasoned amateurs; all aspects from building first model to specialized recovery devices, payloads, launching ranges, clubs and contests; filled with easily read diagrams, photographs that get to the point

Villiard, Paul. WILD ANIMALS AROUND YOUR HOME. Scribners, 1975. 160 p. $3.95 paper. elem jhs

Wild animals around suburban and rural homes in text on how to deal with them in their natural state as pets or as temporary residents; dispels myths concerning unpopular animals--e.g., snakes; lists wildlife regulating agencies in each state; humorous and humane

Weems, John Edward. THE TORNADO. Doubleday, 1977. 180 p. $7.95. jhs shs

From personal observation and eye-witness interviews a May 11, 1953, killer storm in Waco, Texas, is relived; briefly describes specific tornadoes, various facts about their formation; reported so well one feels a storm has been experienced

Weinberg, Steven. THE FIRST THREE MINUTES: A MODERN VIEW OF THE ORIGIN OF THE UNIVERSE. Basic, 1977. 188 p. $8.95. shs

Combines present knowledge of physics and chemistry surrounding beginnings of universe in cohesive picture of critical period; background mathematics, chemistry, and physics require at least high school mastery; adequate diagrams

White, William H., Jr. FOREST AND GARDEN. Sterling, 1976. 96 p. $4.89. jhs shs

Introduction to ecology of forest and garden in general description of classification of plants, their life cycle and succession, relationships to animals, particularly those living at margins or interface of forests and gardens; specific information on some animal communities; black-and-white and color photos

Books in a Series

THE ANIMAL FRIENDS BOOKS. Carolrhoda, 1977. unp. each $3.95. K prim elem-4

Anders, Rebecca. ALI THE DESERT FOX
Anders, Rebecca. CLOVER THE CALF
Anders, Rebecca. FIGARO THE HORSE
Anders, Rebecca. TANYA THE TURTLEDOVE
Anders, Rebecca. WINSLOW THE HAMSTER
Johnson, Sylvia A. ELEPHANTS AROUND THE WORLD
Johnson, Sylvia A. THE LIONS OF AFRICA
Overbeck, Cynthia. RUSTY THE IRISH SETTER
Pursell, Margaret Sanford. JESSIE THE CHICKEN
Pursell, Margaret Sanford. MANDY THE MONKEY
Pursell, Margaret Sanford. POLLY THE GUINEA PIG
Pursell, Margaret Sanford. SHELLEY THE SEA GULL

*For further titles in series, see Page 33 of January 1977 Science Advisory List.

Series about various domestic and wild animals, their habitats, behavior, diet, etc.; named animals depicted with children who care for them and discover their habits, personalities; unself-consciously and realistically non-sexist--boys are gentle, girls can groom a horse or feed a fox; interesting, informative, appealing; originally published in France; photographs in black and white and color; for reading aloud or individual reading

BOOKS (FOR TEACHER USE)

Byck, Robert, ed. COCAINE PAPERS BY SIGMUND FREUD. NAL, 1974. 416 p. $4.95 paper.

Sigmund Freud's little-known but extensive experimentation with cocaine is subject of papers, correspondence, dream interpretations anthologized here; notes by daughter, Anna Freud; in-depth presentation; in view of renewed popularity and research concerning cocaine, this title could be especially interesting to teachers in science, social studies, drug education

Strahler, Arthur N. PRINCIPLES OF PHYSICAL GEOLOGY. Harper, 1977. 419 p. $14.95. shs

Author of numerous physical geography and environmental science texts, Strahler surpasses all previous efforts in his first venture into physical geology; comprehensive, clearly written reference; illustrations, though small, are highlights

BOOKS (REFERENCE)

HOW ANIMALS LIVE (5 titles). Described on Reference Books Advisory List

Morton, Julia F. HERBS AND SPICES. Described on Reference Books Advisory List

WILD, WILD WORLD OF ANIMALS (9 titles). Described on Reference Books Advisory List

THE WORLD YOU NEVER SEE (2 titles). Described on Reference Books Advisory List

BOOKS (SUPPLEMENTARY TEXTS)

Misenhimer, Ted. G., and Aviation Education Department. AEROSCIENCE: BASIC TEXTBOOK FOR AEROSCIENCE COURSES. Aero, 1973. 798 p. $9.94. $6.99 paper. shs

Evolution of aircraft presented in text applying laws of physics to flight, primarily to heavier-than-air craft with fixed wings, although principles of lighter-than-air craft and rockets included; information on basic theories of flight, weather, aircraft structure, reciprocating and reaction engines, aircraft performance, stability, and navigation, as well as federal regulations, brief biographical sketches of early aviation pioneers, pilots; many photographs, drawings; interestingly written, minimal technical jargon; useful for aerospace course, independent reading, on technical or scientific aspects of flight

Oxenhorn, Joseph M. Edited by Peter Greenleaf. PATHWAYS IN SCIENCE: EARTH SCIENCE. Comb. ed. Globe, 1977. 514 p. guide $7.05. jhs-8

Series of paperbound earth science volumes combined into one hard-cover text; minimal reading with much vocabulary support, explanation; simple ideas, numerous illustrations, experiments; useful for low-ability students, those with reading problems; paperback teacher's guide accompanies text

Books (Supplementary Texts) in a Series

THE *IDEA* SCIENCE PROGRAM--INVESTIGATE-DISCOVER-EXPERIMENT-ACT. Steck, 1976. each $2.65 paper. teacher's editions with test booklets each $2.65 paper. duplicating masters each $5.50. jhs

Bacon, Ernest, and Richard Nastasi. EARTH-SPACE SCIENCE. 202 p.
Nastasi, Richard, and Ernest Bacon. PHYSICAL SCIENCE. 194 p.
Richmond, Jean. LIFE SCIENCE. 209 p.

Glorified set of workbook-style, laboratory-oriented manuals for life, earth, and physical science offering much to teachers interested in adapting materials to particular problems of students; activities cover only major ideas within each discipline, but do so clearly, thoughtfully; a few editorial mistakes, but generally accurate, moving sequentially and smoothly from idea to idea

FILMS (16MM)

ANIMAL ARCHITECTURE. 16mm. 9 min. sd. guide color $135. BFA, 1977. elem jhs-7

Excellent survey of protective structure developed by animals from both internal and external materials for defense, trapping food, shelter; examines how animals incorporate substances from within their own bodies (e.g., snails, spiders, ant lions) and material from their environment (e.g., beavers, birds)

COAL--THE ROCK THAT BURNS. 16mm. 13 min. sd. guide color $205. Centron, 1976. jhs shs

Characteristics of anthracite, bituminous, and lignite coal; compares modern with earlier mining methods; shows reclamation of land after strip mining, methods for transporting coal, and coal in relation to electric industry; indicates importance of pollution control when using coal in large quantities; mentions by-products of the production of coke from coal; appropriate for earth science, ecology, conservation studies

DOLPHINS. 16mm. 22 min. sd. guide color $225. Macmillan Films, 1975. jhs shs

Describes characteristics and habits of dolphins, lovable animals which have lost their hair, developed layer of fatty tissue to preserve body heat, adapted to aquatic life; shows swimming speed of 35-40 mph, ability to communicate, practice of choosing another female to assist with newly born; reveals dolphins' appeal for people, responsiveness to training

DOWN TO THE SEA. 16mm. 30 min. sd. guide color $445. Centron, 1975. jhs shs

Depicts research and technology involved in understanding ocean processes affecting fishing industry; shows scientists examining mud flats, collecting plankton, scuba diving to study breeding grounds and habits of lobster, using modern equipment to gather, analyze data; ideal to demonstrate how research and management cooperate to solve scientific problems

EARTH: AN INTERPLANETARY PERSPECTIVE. 16mm. 17 min. sd. guide color $280. Paramount/Oxford, 1975. jhs shs

In-depth comparative study revealing commonalities and differences resulting from present and past forces acting on Mars, moon, and earth--erosive, tectonic, volcanic, and weathering forces; demonstrates how space exploration has revealed earth in dramatically different light; outstanding live-action photography

EARTHQUAKES AND VOLCANOES (Revised). 16mm. 12 min. sd. guide color $175. BFA, 1977. jhs shs

Insight into causes of volcanoes, earthquakes, theory of earth's formation; animation and diagrams show how earth movements and surface changes occur, especially by volcanic action from crustal movements; vivid depiction of eruptions, lava flows on Mt. Vesuvius, Etna, Hawaii; volcanic activity stressed--only minor attention to earthquakes and damage caused by them

EDUCATION: WHY SCIENCE? 16mm. 11 min. sd. color $180. Barr, 1977. prim-3 elem jhs

Valuable insight into practical application of science through experiences of students; shows value of gears on bicycle, how heat is absorbed by various colors, specific information on nutrition, even principles of science underlying picnic or cook-out fun; excellent case for why science should be studied; could serve to introduce course

GARDENING: AN INTRODUCTION. 16mm. 10 min. sd. guide color $145. BFA, 1976. elem jhs

Information essential to developing, caring for a backyard garden: developing compost, planting different kinds of seeds, propagating new plants from root and stem cuttings, importance of watering and weeding; multiracial; technical terms defined; excellent project stimulus

THE GRIZZLY BEAR. 16mm. 16 min. sd. guide color $230. Paramount/Oxford, 1974. elem jhs

Examines life, habitats, interactions of endangered grizzly bear; depicts cub's growth, development under mother's guidance, geographical range and location, eating habits, weaning, hunting, playing, resting, and ecological significance of diminishing grizzlies resulting from man's destruction

HOW DOES A LIGHT BULB WORK? 16mm. 5 min. sd. guide color $90. Paramount/Oxford, 1974. prim elem

Brief history of development of light bulb and Thomas Edison's ingenuity and perserverance; parts of light bulb depicted, along with how and why bulb works; student poses questions to adult narrator; *follow-up suggestions for teachers*; good, quick survey of principles enabling a light bulb to glow

THE INSECT SERIES: INSECTS HELPFUL TO MAN. 16mm. 17 min. sd. color $250. Intl. Film Bur., 1976. jhs shs

Economic importance of insects--bees for honey, beeswax, pollination, silkworms raised commercially for silk in Asia, blowflies and dung beetles for recycling organic wastes, ladybugs for biological control of aphids

THE INSECT SERIES. THE LIFE CYCLE OF INSECTS: COMPLETE METAMORPHOSIS. 16mm. 20 min. sd. color $285. Intl. Film Bur., 1976. jhs shs

Development of insects from egg to larva, to pupa, to adult, and cycle's completion; illustrates that butterflies form chrysalis but moths spin cocoon in pupa stage where development of adult form occurs; other differences in moths and butterflies noted, as are distinguishing characteristics of males and females; beautifully colored, time-lapse photography strengthens concepts presented; for biology or life science

LOOKING AT PLANTS: HOW PLANTS MOVE. 16mm. 11 min. sd. guide color $145. Intl. Film Bur., 1975. jhs shs

Time-lapse photography shows movement of plants in their natural growth processes; demonstrates how green leaves move toward light, roots grow downward, tendrils respond to touch and grow around supporting stick; shows leaves of Venus's-flytrap responding to touch in order to trap insects for food, sensitive pea leaves wilting when touched; appropriate for life science, biology classes

MILLIONS AND MILLIONS OF BUBBLES. 16mm. 11 min. sd. guide color $155. Churchill, 1974. prim elem

Seashore life and recreation vicariously experienced through the senses of two children; setting and mood create aesthetic appreciation for enjoying surf, collecting shells, observing animals (e.g., starfish, scary crab); no specific scientific concepts; preview before purchase

MOUNTAIN LIFE ZONE COMMUNITIES. 16mm. 21 min. sd. guide color $285. Intl. Film Bur., 1976. shs

Survey of ecological communities of Rocky Mountains: the grasslands, deciduous and coniferous forests, alpine-arctic zone; shows various animals native to the area existing within or crossing over communitiy boundaries, according to needs and seasons; suitable for studies in ecology and biology

A NEW LOOK AT LEEUWENHOEK'S "WEE BEASTIES." 16mm. 12 min. sd. guide color $180. Wards, 1975. shs

Summary of microscopic life forms living in water, Leeuwenhoek's original observations, and life of amoeba, paramecium, vorticella, volvox, euglena, others; microphotography demonstrates physical, physiological functions--e.g., locomotion, digestion; considerable film time devoted to observing functions without narration, providing opportunities for building interest, continuing exploration into functions of "wee beasties"

OTTERS, CLOWNS OF THE SEA. 16mm. 14 min. sd. guide color $210. Paramount/Oxford, 1974. prim-3 elem jhs shs-10

Follows growth and development of Southern sea otter under guidance of its mother shown devotedly protecting, feeding her young; much information on otters' environment in underwater photography revealing species at play, in search of food,

OTTERS, CLOWNS OF THE SEA. (Cont'd)

in different moods; creates awareness of species infrequently encountered by North Carolinians

SCIENCE - NEW FRONTIERS SERIES: EXPLORING THE HUMAN BRAIN. 16mm. 18 min. sd. guide color $260. BFA, 1977. shs

Explores structure and functions of human brain and central nervous system, specific functions of brain stem, cerebellum and cerebrum, cellular structure of nerves, electro-chemical transmission of nerve impulses and synapses; mentions effects of LSD, alcohol, other drugs on nervous system; excellent introductory material

SCIENCE - NEW FRONTIERS SERIES: EXTENDING LIFE. 16mm. 15 min. sd. guide color $210. BFA, 1976. shs

Implications of extending life through surgical transplants and psychological effects of transplants on recipients; covers transplantation of middle ear bones, tissue banks, growing practice of using metal and plastic bones, heart valves, and arteries to replace damaged tissues, experiments in manipulating genes and chromosomes; advances idea that most important aspect of such life extension is learning and understanding promises, dangers, challenges of bio-science

THE SIMPLE LENS: AN INTRODUCTION. 16mm. 12 min. sd. guide color $175. BFA, 1976. elem jhs

Introduces concepts of light refraction, focal point, focal length, and image; illustrates how invisible energy can make things visible through demonstrations of camera and human eye operating on same principle to organize light to form an image

SOIL: AN INTRODUCTION. 16mm. 9 min. sd. guide color $125. BFA, 1976. elem jhs

Well-organized presentation on importance of soil, soil nutrients, soil formation, different soil types; reviews role of soil in bacteria, animal, plant life and its function in total ecosystem; for in-depth study in elementary grades or introduction in junior high earth science programs

WHAT ANIMALS SEE. 16mm. 10 min. sd. guide color $150. Macmillan Films, 1975. jhs shs

Compares animal sight and human sight in description of eye structure, placement of light reception (rods and cones) and tapetum which make color perception and night vision possible; reveals human eyes to be most versatile, selective, but not keenest; shows animal behavior is determined partly by eye structure, vision; teaches that most animals see only shades of gray, although birds of prey have color vision and may have acute vision at near and far distances

THE YEAR OF THE WILDEBEEST. 2 reels 16mm. 55 min. sd. color $645. Benchmark, 1975. jhs shs

The story of the yearly migration of the gnu, or wildebeest, showing herds moving 2000 miles across plains as grass dies and drought begins, toward Lake Victoria in northwest; migratory life, breeding, sharing grazing grounds with different grazing animals, all well depicted; insight into dangers, attacks of predators along migration route; excellent study of wildebeest; comprehensive; superior photography

FILMSTRIPS (SOUND)

Filmstrips (Sound) in a Series

SILK: FROM ANCIENT SECRET TO MODERN INDUSTRY. 4 color filmstrips, 4 cassette tapes, guide $71. Disney, 1975. elem jhs shs-10
Titles: THE SILKWORM: NATURE'S MINIATURE SILK FACTORY; SILK: THE SECRET FABRIC OF CHINA; THE SILK SECRET GETS OUT; LIFE ON A SILK FARM

Life cycle of silkworm, history of its economic value and international political implications, and functioning of modern silk-producing industry; useful introduction, summary, or enrichment material for science, social studies, textiles

SLIDE SETS (SOUND)

SCIENCE AND SOCIETY. THE NEW GENETICS: RIGHTS AND RESPONSIBILITIES. 2 units each containing 1 carousel cartridge, 80 color slides, 1 cassette tape, one 12" disc recording 33 1/3 rpm; guide $119.44. Ctr. Humanities, 1974. shs

Summarizes history of genetics and gives insight into implications of controlled reproduction; elaborates on causes and probabilities of inherited abnormalities, role of genetic counseling, conflicts associated wtih sterilization, abortion; presents conflicting views without endorsing any; provides pauses to allow discussion; some slides repetitious, adding little to purpose; good teacher's guide

BOOKS REVIEWED IN OTHER SOURCES

The books listed below have received favorable reviews in one or more of the following reviewing sources. Code letters for the reviewing sources are cited after the bibliographic entry for each title. The reviewing sources and their code letters are as follows:

AMERICAN LIBRARIES	AL
APPRAISAL	A
BOOK REVIEW DIGEST	BRD
BOOKLIST	BKL
BULLETIN OF THE CENTER FOR CHILDREN'S BOOKS	BCCB
CHILDREN'S BOOK REVIEW SERVICE	CBRS
CHOICE	C
HORN BOOK	HB
KIRKUS REVIEWS	KR
LIBRARY JOURNAL	LJ
PUBLISHERS WEEKLY	PW
SCHOOL LIBRARY JOURNAL	SLJ
SCIENCE AND CHILDREN	SC
SCIENCE BOOKS AND FILMS	SBF
TOP OF THE NEWS	TN
WILSON LIBRARY BULLETIN	WLB

An asterisk after the code letters for the reviewing source indiates that the title was highly recommended in that particular reviewing source.

Adler, Irving. THE ENVIRONMENT. John Day, 1976. 48 p. $5.95. prim elem
BKL HB KR SBF SLJ

Aldrich, Arthur. FLOWERS AND FLOWERING PLANTS. Watts, 1976. 48 p. $3.90.
prim elem-4 BKL SBF SLJ

Allison, Linda, and David Katz. THE BROWN PAPER SCHOOL PRESENTS BLOOD AND GUTS: A WORKING GUIDE TO YOUR OWN INSIDES. Little, 1976. 127 p. $6.95. $3.95 paper.
elem jhs-7 BKL SBF** SLJ

Asimov, Isaac. HOW DID WE FIND OUT ABOUT NUCLEAR POWER? Walker & Co., 1976. 64 p. $5.85. elem jhs-7 SLJ

Asimov, Isaac. THE SOLAR SYSTEM. Follett, 1975. 32 p. $2.97. prim-3 elem SBF*

Bendick, Jeanne. EXPLORING AN OCEAN TIDE POOL. Garrard, 1976. 64 p. $3.94. prim elem-4 SBF* SLJ

Bendick, Jeanne. THE MYSTERY OF THE LOCH NESS MONSTER. McGraw, 1976. 128 p. $5.72. elem jhs BCCB BKL SBF**

Berger, Melvin. ENERGY FROM THE SUN. Crowell, 1976. 32 p. $5.95. prim elem-4 BKL HB KR SBF* SLJ

BOOKS FOR YOUNG EXPLORERS. SET V. Natl. Geog., 1976. each 32 p. $5.70. prim elem-4 BKL

Bridge, Linda McCarter. THE PLAYFUL DOLPHINS
Gray, William R. CAMPING ADVENTURE
McClung, Robert M. ANIMALS THAT BUILD THEIR HOMES
Rinard, Judith E. WONDERS OF THE DESERT WORLD

Brady, Irene. WILD MOUSE. Scribners, 1976. unp. $5.95. prim elem BCCB* BKL* HB KR PW SLJ

Branley, Franklyn M. BLACK HOLES, WHITE DWARFS, AND SUPERSTARS. Crowell, 1976. 113 p. $7.50. elem-6 jhs BKL KR SLJ

Campbell, Gail. SALT-WATER TROPICAL FISH IN YOUR HOME. Sterling, 1976. 144 p. $6.39. jhs shs BKL SBF

Cazeau, Charles J., Ph.D. EARTHQUAKES. Follett, 1975. 32 p. $2.97. elem jhs SBF*

Cecil, George. DIGGING. Watts, 1976. 48 p. $3.90. prim SLJ

Cecil, George. SALT. Watts, 1976. 48 p. $3.90. prim SBF* SLJ

A CLOSER LOOK AT BOOKS. Watts, 1976, 1977. each 30 p. each $4.90. elem jhs-7 BKL SBF* SLJ

Cook, David, and Jill Hughes. A CLOSER LOOK AT APES
Cook, Susannah. A CLOSER LOOK AT BEARS AND PANDAS
Cook, Susannah and David. A CLOSER LOOK AT OCEAN LIFE
Halstead, Beverly. A CLOSER LOOK AT PREHISTORIC MAMMALS
Hicks, J. L. A CLOSER LOOK AT ARCTIC LANDS
Hicks, J. L. A CLOSER LOOK AT BIRDS
Holbrook, John. A CLOSER LOOK AT ELEPHANTS
Hughes, Jill. A CLOSER LOOK AT BEES AND WASPS

Cooper, Kay. ALL ABOUT GOLDFISH AS PETS. Messner, 1976. 64 p. $6.29. prim-3 elem BKL KR SLJ

Dennis, Landt. CATCH THE WIND: A BOOK OF WINDMILLS AND WINDPOWER. Four Winds, 1976. 114 p. $7.95. elem jhs shs BKL* HB KR SBF** SLJ

DiCerto, Joseph J. THE ELECTRIC WISHING WELL: THE SOLUTION TO THE ENERGY CRISIS. Macmillan, 1976. 317 p. $12.95. teacher use BRD C KR LJ PW

Dolensek, Emil P., and Barbara Burn. A PRACTICAL GUIDE TO IMPRACTICAL PETS. Viking, 1976. 382 p. $15. jhs shs BKL BRD KR LJ PW SLJ

Donaldson, Francis. TREES. Watts, 1976. 48 p. $3.90. prim SLJ

Douglas-Hamilton, Iain and Oria. AMONG THE ELEPHANTS. Bantam, 1975. 358 p. $2.25 paper. shs-12 BKL BRD C KR LJ PW

The Environmental Action Coalition. IT'S YOUR ENVIRONMENT: THINGS TO THINK ABOUT--THINGS TO DO. Scribners, 1976. 218 p. $7.95. elem jhs shs-10 HB KR SLJ

Fodor, R. V. METEORITES: STONES FROM THE SKY. Dodd, 1976. 47 p. $4.25. prim-3 elem BKL KR SLJ

Ford, Barbara. KATYDIDS: THE SINGING INSECT. Messner, 1976. 96 p. $6.64. elem BKL KR SBF SLJ

Freschet, Berniece. BIOGRAPHY OF A BUZZARD. Putnam, 1976. 63 p. $4.97. prim-3 elem BCCB BKL KR

Fyson, Marna. STINKERBELLE: THE NARK. Taplinger, 1976. 187 p. $9.95. shs LJ

Glasser, Ronald J., M.D. THE GREATEST BATTLE. Random, 1976. 180 p. $6.95. shs BKL BRD LJ SBF SLJ

Gordon, Esther S. and Bernard L. ONCE THERE WAS A PASSENGER PIGEON. Walck, 1976. unp. $5.95. prim-3 elem BKL KR PW SBF* SLJ

Graham, Ada. FOXTAILS, FERNS, AND FISHSCALES: A HANDBOOK OF ART AND NATURE PROJECTS. Four Winds, 1976. 122 p. $8.95. elem jhs HB KR SLJ

Guest, C. Z. FIRST GARDEN. Putnam, 1976. 127 p. $8.95. jhs-9 shs LJ

Haines, Gail Kay. SUPERCOLD/SUPERHOT: CRYOGENICS AND CONTROLLED THERMONUCLEAR FUSION. Watts, 1976. 81 p. $4.33. jhs-9 shs BKL SBF** SLJ

Hall, Lynn. KIDS AND DOG SHOWS. Follett, 1975. 142 p. $5.97. elem jhs BCCB BKL SLJ

Henry, Marguerite. THE PICTORIAL LIFE STORY OF MISTY. Rand, 1976. 144 p. $5.97. elem jhs BKL SLJ

Hess, Lilo. A PUPPY FOR YOU. Scribners, 1976. 49 p. $6.95. prim-3 elem BKL KR SLJ

Hirsch, S. Carl. THEATER OF THE NIGHT: WHAT WE DO AND DO NOT KNOW ABOUT DREAMS. Rand, 1976. 123 p. $6.79. jhs shs BCCB BKL SBF* SLJ

Hoke, John. DISCOVERING THE WORLD OF THE THREE-TOED SLOTH. Watts, 1976. 88 p. $4.33. elem jhs-7 BKL SLJ

Holman, Michael. CATS. Watts, 1976. 48 p. $3.90. prim elem-4 SLJ

Hopf, Alice L. BIOGRAPHY OF AN ARMADILLO. Putnam, 1975. 62 p. $4.97. prim elem-4 BCCB BKL HB KR SLJ

Hurd, Edith Thacher. THE MOTHER KANGAROO. Little, 1976. 32 p. $5.95. prim BKL BRD HB KR PW SBF SLJ

Isenbart, Hans Heinrich. A FOAL IS BORN. Putnam, 1976. unp. $5.95. prim BKL* KR SBF** SLJ

John, Laurie, ed. COSMOLOGY NOW. Taplinger, 1976. 168 p. $10.95. teacher use C LJ PW

Kalina, Sigmund. HOW TO MAKE A DINOSAUR. Lothrop, 1976. 64 p. $5.21. prim-3 elem BKL KR SLJ

Kaufmann, John. FLYING REPTILES IN THE AGE OF DINOSAURS. Morrow, 1976. unp. $4.59. prim elem-4 BKL KR PW SBF* SLJ

Kevles, Bettyann. WATCHING THE WILD APES: THE PRIMATE STUDIES OF GOODALL, FOSSEY, AND GALDIKAS. Dutton, 1976. 164 p. $8.95. elem-6 jhs BCCB BKL HB KR SBF* SLJ*

Kiefer, Irene. UNDERGROUND FURNACES: THE STORY OF GEOTHERMAL ENERGY. Morrow, 1976. 63 p. $4.59. prim-3 elem BKL HB KR SBF SLJ

Knox, Albert. CLOTH. Watts, 1976. 48 p. $3.90. prim elem-4 BKL SBF* SLJ

Kraft, Betsy Harvey. COAL. Watts, 1976. 66 p. $3.90. prim-3 elem BKL SLJ

Lauber, Patricia. SEA OTTERS AND SEAWEED. Garrard, 1976. 64 p. $4.22. prim elem BKL SBF SLJ

Lee, Albert. WEATHER WISDOM: BEING AN ILLUSTRATED PRACTICAL VOLUME WHEREIN IS CONTAINED UNIQUE COMPILATION AND ANALYSIS OF THE FACTS AND FOLKLORE OF NATURAL WEATHER PREDICTION. Dolphin, 1976. 180 p. $3.95 paper. jhs-9 shs BKL LJ

Leen, Nina. THE BAT. Holt, 1976. 79 p. $6.95. prim-3 elem jhs BCCB BKL HB KR PW SBF** SLJ

Lewin, Ted. WORLD WITHIN A WORLD: EVERGLADES. Dodd, 1976. 64 p. $5.95. elem jhs BKL SBF SLJ

Lewis, Richard S. FROM VINLAND TO MARS: A THOUSAND YEARS OF EXPLORATION. Quadrangle, 1976. 436 p. $15. shs BKL KR LJ PW

Lippman, Peter. ANIMALS! ANIMALS! Golden, 1976. 68 p. $6.95. prim elem-4 PW

Lowery, Barbara. MAMMALS. Watts, 1976. 47 p. $3.90. prim elem-4 SLJ

McDearmon, Kay. POLAR BEAR. Dodd, 1976. 46 p. $4.50. prim-3 elem BKL KR SBF SLJ

McGovern, Ann. SHARKS. Four Winds, 1976. 47 p. $5.95. prim elem SBF SLJ

McGovern, Ann. THE UNDERWATER WORLD OF THE CORAL REEF. Four Winds, 1976. 40 p. $5.95. prim-3 elem-4 BKL KR SLJ

Martin, Lynne. PUFFIN: BIRD OF THE OPEN SEAS. Morrow, 1976. 95 p. $5.21. elem jhs-7 KR SBF* SLJ

Moore, Patrick, and Iain Nicolson. BLACK HOLES IN SPACE. Norton, 1976. 126 p. $7.95. shs-12 BKL* BRD C LJ SLJ

Napier, John. MONKEYS WITHOUT TAILS. Taplinger, 1976. 120 p. $16.95. shs BKL KR LJ PW

Newton, James R. THE MARCH OF THE LEMMINGS. Crowell, 1976. 34 p. $5.95. K prim BCCB BKL HB KR SBF** SLJ

Olson, McKinley C. UNACCEPTABLE RISK: THE NUCLEAR POWER CONTROVERSY. Bantam, 1976. 309 p. $2.25 paper. teacher use BRD C LJ PW

Paraquin, Charles H. EYE TEASERS: OPTICAL ILLUSION PUZZLES. Sterling, 1976. 96 p. $3.99. prim-3 elem SLJ

Pitt, Valerie. BATS. Watts, 1976. 63 p. $3.90. elem jhs BKL CBRS SBF* SLJ

Polseno, Jo. SECRETS OF A CYPRESS SWAMP: THE NATURAL HISTORY OF OKEFENOKEE. Golden, 1976. 61 p. $5.95. elem jhs BKL KR PW SBF** SLJ

Pringle, Laurence. LISTEN TO THE CROWS. Crowell, 1976. 32 p. $5.95. prim-3 elem jhs-7 BCCB BKL CBRS KR SLJ

Quinn, John R. THE WINTER WOODS. Chatham, 1976. 124 p. $8.95. shs LJ

Rau, Margaret. MUSK OXEN: BEARDED ONES OF THE ARCTIC. Crowell, 1976. 41 p. $5.95. elem jhs-7 HB KR SBF** SLJ

Ronai, Lili. CORALS. Crowell, 1976. 33 p. $5.95. prim elem BCCB BKL KR SLJ

Roth, Arnold. A COMIC BOOK OF PETS. Scribners, 1976. 65 p. $6.95. elem jhs BKL KR PW

Ryan, Martha. WEATHER. Watts, 1976. 48 p. $3.90. prim SLJ

Samson, Jack. FALCONRY TODAY. Walck, 1976. 112 p. $8.95. jhs shs BCCB BKI KR SLJ

Schick, Alice. THE SIAMANG GIBBONS: AN APE FAMILY. Westwind, 1976. (available from Follett). 81 p. $5.97. elem BCCB BKL PW SLJ